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Selected References



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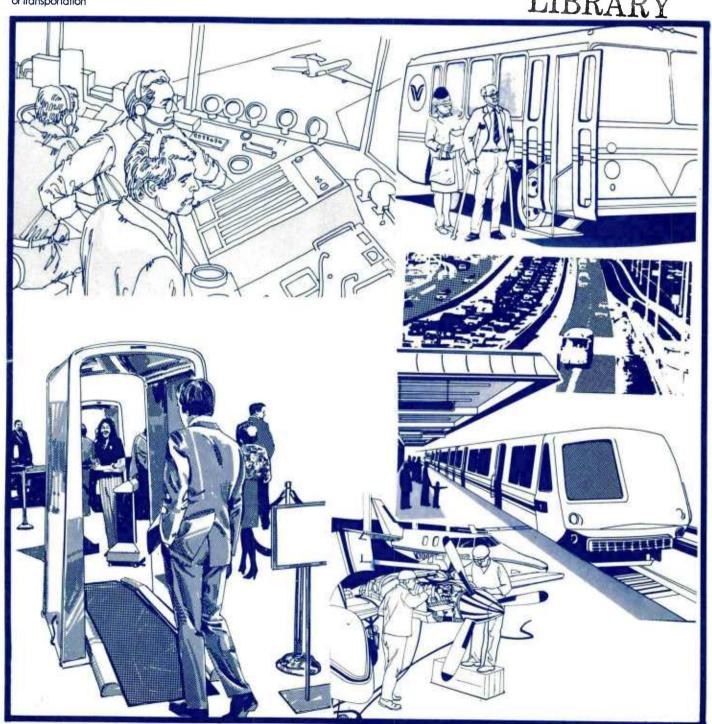
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4.	Airport Problems: Access and Air Traffic Congestion February 1971	AD-722 206
5.	Hijacking July 1971	AD-729 414
6.	Urban Mass Transportation September 1971	AD-733 773
7.	Aircraft and Air Pollution December 1971	AD-735 943
8.	Transportation for the Handicapped April 1975	AD-A013 117
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1. Report No.	2. Government Acces	ssion No. 3.	Recipient's Cotolog	No.	
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		3.	August 1980)	
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		6.	Performing Organizat	ion Code	
3		8. 1	erforming Organizat	ion Report No.	
7. Author(s)					
Anne B. La Foy	Anne B. La Foy		DOT-OST-L1B-	11	
9. Performing Organization Name and Address		10.	Work Unit No. (TRA	IS)	
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Selected References

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August 1980

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INTRODUCTION

This is a selected, partially annotated listing of periodical articles, reports and books held by the Department of Transportation Library on the subject of energy use in transportation.

The period covered is approximately from the time of the energy crisis of 1973-74 until completion of this bibliography, late 1979. A few earlier references are included as background. Citations are representative of the types of material available rather than indicative of the extent of the collection; some 200-300 additional citations were not used simply in order to hold the document to reasonable size. Not all references in certain subject categories are directly addressed to transportation but are included to provide overall energy background material, especially in such areas as economics, forecasts, and planning and policy.

Arrangement is by subject, with personal author and corporate source indexes. Sources used were in-house catalogs and periodical index files.

AVAILABILITY OF PUBLICATIONS

The Department of Transportation Library has all of the publications referred to in this bibliography. The library's call number, e.g., TJ163.3.T83, or accession number in the case of technical reports located in the 10A Services Branch, e.g., IR 79-0189, follows the citation. The symbols HQ and/or 10A following the call number indicate whether the document is held by the main library, the branch library, or both. Where known, numbers beginning with AD-, PB-, N-, COM-, etc., appear following the library symbol and indicate availability of the document through the National Technical Information Service, 5285 Port Royal Road, Springfield, Va. 22161.

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Compiled by:

Anne B. La Fov

ENERGY USE IN TRANSPORTATION

Table of Contents

INTRODUCTION	V
ENERGY - GENERAL	1
ENERGY AND TRANSPORTATION	4
CONSERVATION	8
CONSUMPTION	11
ECONOMICS	15
FORECASTS	18
FUELS	22
GOVERNMENT	27
MODES	32
GENERAL COMPARISONS	32
AIR - GENERAL CONSERVATION TECHNOLOGY AND TECHNIQUES	35 37
RAIL	42
ROAD - GENERAL CONSERVATION TECHNOLOGY AND TECHNIQUES	45 48
URBAN MASS TRANSIT	54
WATER	58
PLANNING AND POLICY	59
RESEARCH AND DEVELOPMENT	63
SHORTAGES	66
STATISTICS	69
INDEXES	70
INDIVIDUAL CORPORATE SOURCE	70 75

ENERGY

GENERAL

- Abelson, Philip H., ed. ENERGY: USE, CONSERVATION, AND SUPPLY. Washington, American Association for the Advancement of Science, 1974. vi, 154 p. (HD9502.U52A23) HQ, 10A Compendium of energy related articles from SCIENCE magazine.
- 2. Commoner, Barry. THE POLITICS OF ENERGY. New York, Knopf, 1979. ix, 101 p. (HD9502.U52C674) HQ
 What is really happening, where the energy crisis is taking us, and what can be done to solve it.
- 3. Conant, Melvin A. and Fern Racine Gold. THE GEOPOLITICS OF ENERGY.
 Boulder, Colo., Westview Press, 1978. xviii, 224 p. (HD9502.A2C688)
 HQ

 Analyzes consequences of new worldwide energy situation in which industrialized countries remain dependent on oil imports

which industrialized countries remain dependent on oil imports while control of those resources has passed to an increasingly small number of less-developed countries whose interests do not necessarily coincide with the consumers!.

- 4. COOPERATIVE APPROACHES TO WORLD ENERGY PROBLEMS. Washington, The Brookings Institution, 1974. iv, 51 p. (HD9540.5.C67) HQ,10A A tripartite report by fifteen experts from the European community, Japan, and North America meeting in Brussels. Conference sponsored by the European Community Institute for University Studies, the Japan Economic Research Center, and the Brookings Institution.
- 5. EIC ENERGY DIRECTORY UPDATE SERVICE. New York, Environment Information Center, Inc., Energy Reference Department, Sept. 1975— (REF HD9545.E74) HQ, 10A

 Supersedes THE ENERGY DIRECTORY.
- 6. THE ENERGY DIRECTORY. New York, Environment Information Center, Inc., Energy Reference Department, 1974— (REF HD9545.E74) HQ, 10A Includes federal, regional, and state government, trade, professional, and research organizations, information sources, solar energy update.

 Superseded by EIC ENERGY DIRECTORY UPDATE SERVICE.
- 7. THE ENERGY INDEX. New York, Environment Information Center Inc., Energy Reference Department, 1973-76. (REF Z5853.P8E74) HQ, 10A Annual guide to the key energy literature of the year, including articles, government documents, statistics, research reports, conference proceedings, books, films.
- 8. THE ENERGY SOURCE BOOK. Alexander McRae and Janice L. Dudas, eds. Germantown, Md., Center for Compliance Information, 1977. ix, 724 p. (REF HD9502.U52E757) HQ, 10A

 Compilation of government and non-government source material selected for potential contribution to decision-making process

in energy regulation. Also contains text of law establishing Department of Energy.

- 9. ENERGY SOURCES FOR THE FUTURE. Proceedings of a symposium sponsored by the U.S. Energy Research and Development Administration, Office of University Research, Oak Ridge, Tennessee, July 5-23, 1976.

 Jerome L. Duggan and Roger J. Cloutier, eds. Oak Ridge, Tenn., Oak Ridge Associated Universities, 1977. v, 422 p. (TJ163.2.E74) HQ
- 10. Ezzati, Ali. WORLD ENERGY MARKETS AND OPEC STABILITY. Lexington, Mass., Lexington Books, 1978. xiv, 205 p. (HD9502.A2E995) HQ

 Presents analytical framework for determination of equilibrium prices, supply, demand, imports and exports of alternative forms of energy, interactions of oil-importing and -producing countries, and OPEC price and production strategies.
- 11. Fisher, John Crocker. ENERGY CRISES IN PERSPECTIVE. New York, John Wiley & Sons, 1974. ix, 196 p. (HD9540.6.F58) HQ, 10A World energy activities, from discovery through recovery, transportation, refining, and use, and major factors affecting them.
- 12. THE GREAT ENERGY MESS. Time, v. 114(1), July 2, 1979: 14-17, ff. HQ, 10A

 Cover story: gas lines, price rises, outlook.
- 13. INTERNATIONAL ENERGY SUPPLY: A PERSPECTIVE FROM THE INDUSTRIAL WORLD. Working paper. New York, Rockefeller Foundation, 1978. x, 33 p. (HD9560.5.177) HQ
 Group drawn from France, Federal Republic of Germany, Italy, Gt. Britain, Japan, and the United States assesses most important international policy issues in world energy supply outlook in general and in the future of oil in particular.
- 14. Loftness, Robert L. ENERGY HANDBOOK. New York, Van Nostrand Reinhold Co., 1978. vii, 741 p. (REF TJ163.2.L74) HQ, 10A Data and information on energy resources, consumption, new sources, environmental aspects, costs, with glossary and conversion tables.
- 15. MCGRAW-HILL ENCYCLOPEDIA OF ENERGY. Daniel N. Lapedes, ed.
 New York, McGraw-Hill Book Co., 1976. 785 p. (REF TJ163.2.M23)
 HQ, 10A

 Over 300 articles by specialists covering espects of special
 - Over 300 articles by specialists covering aspects of energy from economic and political to environmental and technological.
- 16. McNerney, N. C. and Thomas F. P. Sullivan, eds. ENERGY REFERENCE HANDBOOK; A GLOSSARY, WITH ABBREVIATIONS AND CONVERSION TABLES. Washington, Government Institutes, Inc., 1974. 280 p. (REF HD9540.65.M23) HQ, 10A

- 17. National Academy of Engineering, Task Force on Energy. U.S. ENERGY PROSPECTS: AN ENGINEERING VIEWPOINT. Washington, 1974. iii, 141 p. (TJ153.N268) HQ, 10A

 Assesses practical engineering feasibility of major production programs in specific energy areas for time frame up to 1985, identifies government and industry action needed to implement them, and physical, technical, cost, and schedule aspects thereof.
- 18. THE NATIONAL ENERGY PROBLEM. Robert H. Connery and Robert S. Gilmour, eds. Published for the Academy of Political Science. Lexington, Mass., Lexington Books, 1974. xii, 194 p. (Proceedings of the National Academy of Political Science, v. 31, no. 2) (HD9502.U52N37) HQ, 10A

 Series of papers on the problem, its impact, international implications, and energy policy and politics.
- 19. National Research Council, Commission on Natural Resources, Committee on Energy and the Environment. IMPLICATIONS OF ENVIRONMENTAL REGULATIONS FOR ENERGY PRODUCTION AND CONSUMPTION. Washington, National Academy of Sciences, 1977. xvi, 233 p. (TJ163.25.U6N44) HQ

A report to the U.S. Environmental Protection Agency.

- 20. O'Toole, James and the University of Southern California Center for Futures Research. ENERGY AND SOCIAL CHANGE. Cambridge, Mass., Massachusetts Institute of Technology Press, 1976. xxi, 185 p. (HD9502.U52085) HQ, 10A

 Explores potential of futures methods to contribute useful long-range data to top management in both public and private sectors.
- 21. Udall, Stewart L., and others. THE ENERGY BALLOON. New York, McGraw-Hill Book Co., 1974. 288 p. (HD9502.U52U32) HQ, 10A
 "...a provocative position paper and a detailed outline of imperative reforms and changes." author.
- 22. THE WORLD ENERGY BOOK: AN A-Z, ATLAS, AND STATISTICAL SOURCE BOOK. David Crable and Richard McBride, eds. New York, Nichols Publishing Co., 1978. 259 p. (REF HD9502.A2W78) HQ, 10A

 Guide to energy sources, energy related terminology, economics, and all factors related to the search for, extraction of, production, and utilization of the major and alternative sources of energy.
- 23. WORLD ENERGY CONFERENCE SURVEY OF ENERGY RESOURCES. Compiled by Harold E. Goeller and others. New York, U.S. National Committee of the World Energy Conference, 1974. viii, 400 p. (HD9540.5.W67) HQ, 10A

Survey contributed to by 74 nations.

ENERGY AND TRANSPORTATION

GENERAL

- 24. Burton, H. Robert. THOUGHTS ON TRANSPORTATION AND ENERGY. Transportation Engineering, v. 47(10), Oct. 1977: 31-34. HQ, 10A

 In response to receiving the 21st Theodore M. Matson Memorial Award for outstanding contributions to the advancement of traffic engineering.
- 25. ENERGY AND TRANSPORTATION. Warrendale, Pa., Society of Automotive Engineers, 1976. 69 p. (TL1.S6A3 SP-406) HQ, 10A

 Papers presented at a forum organized by the SAE Fuels and Lubricants Activity and held as part of the 1975 National Automobile Engineering Meeting. Papers cover passenger cars, heavy-duty trucks, aircraft, and other forms of transport, as well as availability of energy as petroleum and in alternate forms.
- 26. ENERGY: GONE TODAY HERE TOMORROW? Automotive Engineering, v. 82(5), May 1974: 68-71, ff. HQ, 10A

 Transportation directly consumes one-quarter of total energy used in United States.
- 27. Gambaccini, Louis J. PUBLIC TRANSPORTATION AND THE LAST DECADES
 OF PETROLEUM. Transit Journal, v. 5(3), Summer, 1979: 3-16. HQ
 Role of petroleum; impact of 1973-74 oil embargo; the automobile; long-term, self-help conservation strategies; land use;
 relationship to urban revitalization.
- 28. Goss, W. P. and J. G. McGowan. TRANSPORTATION AND ENERGY A FUTURE CONFRONTATION. Transportation, v. 1(3), Nov. 1972: 265-289. HQ

 Predictions of world's petroleum supplies and primary dependence of transportation systems on petroleum indicate depletion of these supplies in the next 50 years unless major changes in transportation, energy planning, and policy making are forthcoming.
- 29. Husted, Robert A. ENERGY IN TRANSPORTATION. Washington, U.S. Dept. of Transportation, Research and Special Programs Administration, Transportation Programs Bureau, 1978. ii, 39 p. (HE18.5.A354 no. DOT-RSPA-DPB-20-78-13) HQ PB-282-928

 Discusses near-term transportation energy demand, vehicle design considerations, and transportation energy conservation opportunities. Concludes that additional conservation can tide us over until appropriate socioeconomic solutions materialize for alternative transportation energy resources other than petroleum.
- 30. INTERNATIONAL SYMPOSIUM ON THE EFFECTS OF ENERGY SHORTAGE ON TRANSPORTATION BALANCE. Transportation Research (Great Britain), v. 8(4-5), Oct. 1974: entire issue.

 Resources, conservation, consumption, economics, modal impacts. HQ, 10A

- 31. Jilek, Glenn and Richard Osborne. ENERGY CONSIDERATIONS IN TRANSPORTATION PLANNING. Washington, U.S. Federal Highway Administration, Office of Highway Planning, 1979. 37 p. (TJ163.5.T7J56) HQ
- 32. Kouskoulas, Vasily, and others. INFORMATION SYSTEM FOR TRANS-PORTATION ENERGY. Transportation Engineering Journal of the ASCE, Proceedings of the American Society of Civil Engineers, v. 103(TE5), Sept. 1977: 635-650. HQ, 10A

Development of framework of an information system for transportation energy consumption to measure socioeconomic and technological trends in relation to transportation energy.

33. Lukasiewicz, J. ENERGY AND TRANSPORTATION IN CANADA AND THE UNITED STATES. High Speed Ground Transportation, v. 9(3), Fall 1975: 151-174. HQ

Evaluation of fuel savings to be realized through use of more economical cars and partial shift of automobile, air, and truck traffic to rail and urban transit.

34. McMahon, Noel. ENERGY - IMPLICATIONS FOR TRANSPORT. Chartered Institute of Transport, London, Journal, v. 37(12), Sept. 1977: 365-369. HQ

Author is Secretary of the Department of Transport and Power, Republic of Ireland. Topics include energy crisis, international reactions, energy consumption in transport, private cars, reducing fuel consumption, road haulage, railways, shipping, air transport, substitute fuels.

- 35. MAINTAINING MOBILITY IN AN ENERGY SCARCE ERA. Transportation USA, v. 5(4), Summer 1979: 2-15. HQ, 10A

 A changing America, a new kind of car, railroad survival, solar energy for transportation.
- 36. Mitre Corporation. ENERGY AND ENVIRONMENTAL ASPECTS OF U.S. TRANSPORTATION. McLean, Virginia, Feb. 1974. 76 p. MTP-391. (IR 74-0608) 10A

Near term transportation energy conservation best effected by pricing measures; long term will rely on technological changes, mode shifts, and land use.

37. NATIONAL CONFERENCE ON THE EFFECTS OF ENERGY CONSTRAINTS ON TRANS-PORTATION SYSTEMS, 4TH. Proceedings, Aug. 2-6, 1976, Union College, Schenectady, N.Y. Ram K. Mittal, conference director and editor. Co-sponsored by the U.S. Department of Energy. Dec. 1977. xiii, 544 p. (TJ163.3.N281976) HQ

Goal of conference was to bring experts and interested participants together for free exchange of information and data, and to find ways for conserving energy in transportation sector.

38. National Research Council, Transportation Research Board.
ENERGY EFFECTS, EFFICIENCIES, AND PROSPECTS FOR VARIOUS MODES
OF TRANSPORTATION. Washington, 1977. 57 p. (TE5091.N283 no. 43)
HO

Synthesis of large body of literature documenting efficiency of various transportation vehicles under various conditions; includes specifics of circumstance, assumptions, and sources.

- 39. Neveu, Alfred J. PUBLIC OPINION SURVEY ON ENERGY AND TRANS-PORTATION. Sponsored by the U.S. Dept. of Transportation. Albany, New York State Dept. of Transportation, Planning Division, 1977. 47 p. (HE213.N7A32 no. 135) HO
- 40. Peterson, Francis S. PETROLEUM ENERGY. Lubrication (Texaco), v. 61, Oct.-Dec., 1975: 57-72. HQ

 Estimates of oil reserves, current United States major energy sources; the automobile in the United States; conservation; systematic use of energy; energy consumption by various modes of transportation in the United States.
- 41. Rand Corporation. GROWTH RATES WITHIN THE TRANSPORTATION SECTOR. Santa Monica, Calif., Jan. 1973. 9 p. P-4935. (IR 75-0043) 10A Analysis of demands which create higher-than-average growth rate in transportation sector, exceeding rate of increase for rest of country. Paper presented at a seminar on "Energy as a scarce resource," Dec. 9, 1972, California Institute of Technology.
- . TRANSPORTATION AND ENERGY. Santa Monica, Calif., June 1973. 20 p. P-5025. (IR 74-0004) 10A

 Reasons for growth in energy use by transportation, and modal shifts due as petroleum supplies decrease.
- 43. Sanson, Robert L. ENERGY, LAND USE AND THE ENVIRONMENT: THE IMPACT ON TRANSIT. Transit Journal, v. 1(4), Nov. 1975: 6-20. HQ

 Worldwide origins of the transportation energy shortage; higher energy costs and automobile use; long-term impact
- 44. TRANSPORTATION AND ENERGY: WHO DOES WHAT WITH HOW MUCH? Railway Age, v. 174(12), June 25, 1973: 40-41. HQ

 For transportation, implications of whole energy situation are immense, especially with inescapable

of higher energy prices on travel.

tie-in of energy and environment.

45. TRANSPORTATION FACILITIES WORKSHOP: PASSENGER, FREIGHT AND PARKING. Proceedings of a conference, May 22-24, 1974, cosponsored by the American Society of Civil Engineers, Carnegie-Mellon University, the Transportation Research Institute, and the Metropolitan Association of Urban Designers and Environmental

- Planners. New York, American Society of Civil Engineers, 1975. 558 p. (HE311.U5T83) HQ
 Forty-eight papers on air, ground transport, energy, environment, governmental policy.
- 46. U.S. Dept. of Transportation. TRANSPORTATION ENERGY CONTINGENCY PLANNING: LOCAL EXPERIENCES. Compiled by the U.S. Federal Highway Administration and the U.S. Urban Mass Transportation Administration. Washington, 1979. 161 p. (TJ163.5.T7U544) HQ
- 47. U.S. Federal Highway Administration, Office of Highway Planning, and Office of Environmental Policy. ENERGY IMPACT ANALYSIS RE-SOURCE INFORMATION. Washington, U.S. Dept. of Transportation, 1976. iv, 103 p. (HD9502.U52U66) HQ

 Compilation of energy utilization factors for use in assessing energy effects of transportation alternatives.
- 48. U.S. Transportation Systems Center, Technology Sharing Program Office. ENERGY PRIMER: SELECTED TRANSPORTATION TOPICS.
 Washington, U.S. Dept. of Transportation, 1975. ii, 75 p. (HE206.3.U73). HQ, 10A

 Broad overview of current and projected transportation energy situation in the United States; energy statistics, supply, and utilization forecasts; evaluation of conservation alternatives.
- 49. Winger, John G. ENERGY CRISIS AND TRANSPORTATION. Automotive Engineering, v. 81(3), Mar. 1973: 38-39. HQ, 10A

 An adequate supply of energy for the transportation sector would have repercussions through the nation's economy.

CONSERVATION

- 50. Arnold, Eugene D. OPPORTUNITIES FOR ENERGY CONSERVATION IN TRANSPORTATION PLANNING AND SYSTEMS MANAGEMENT. Prepared in cooperation with the U.S. Federal Highway Administration. Charlottesville, Va., Virginia Highway and Transportation Research Council, 1978. xii, 69 p. (HE213.V6A87) HQ
- 51. BRI Systems, Inc. ESTEEM: ENCOURAGING SCHOOL TRANSPORTATION EFFECTIVE ENERGY MANAGEMENT. Washington, U.S. Dept. of Transportation, Oct. 1977. ix, 148 p. (TEA684.B75) HQ

 Fuel economy management handbook for directors of pupil transportation, school district administrators, transportation department managers.
- 52.

 . FUEL ECONOMY THROUGH TEAMWORK: ENERGY
 SAVINGS IN SCHOOL TRANSPORTATION PUBLICATION SERIES. Washington,
 U.S. Dept. of Transportation, Oct. 1977. (TEA684.B752) HQ
 Series of five booklets prepared to help school districts
 set up their own fuel conservation program in their own
 fleets.
- 53. Burbank, Cynthia J. TRANSIT AND ENERGY CONSERVATION PROGRAMS: VITALLY LINKED. Transit Journal, v. 2(2), May 1976: 59-64. HQ
- 54. CHANGES IN LIFE STYLE TERMED VITAL TO ENERGY CONSERVATION. Automotive News, v. 50(4551), July 7, 1975:6. HQ
 "Energy consciousness" the deliberate choice of car-pooling, forebearance from unnecessary trips, substitution of walking and cycling, high-density living.
- 55. Flachsbart, Peter C. EVALUATING MOTOR FUEL CONSERVATION POLICIES AT THE COMMUNITY LEVEL. Traffic Quarterly, v. 33(3), July 1979: 397-412. HQ, 10A
- 56. French, Alexander. TRANSPORTATION ENERGY CONSIDERATIONS. Transportation Engineering Journal of the ASCE, Proceedings of the American Society of Civil Engineers, v. 102 (TE1), Feb. 1976: 27-45. HQ, 10A Over half of all petroleum is used for transportation and 40% for highway transportation. A projected 70% improvement in miles per gallon, trip consolidation, shifts to walk and bicycle, and shifts to transit, in that order, could cut highway fuel use in half, absorb more than a doubling of fuel price with no cost increase to the operator, and accommodate forecast increases in travel by 1985.
- 57. FUEL ECONOMY. Automotive Engineering, v. 85(11), Nov. 1977: entire issue. HQ, 10A
- 58. Greene, D. L., and others. REGIONAL TRANSPORTATION ENERGY CONSERVATION DATA BOOK: EDITION 1. Prepared for the U.S. Dept. of Energy, Office of Conservation. Oak Ridge, Tenn., Oak Ridge National Laboratory, 1978. 509 p. ORNL-5435. (TJ163.5.T7R45) HQ

- 59. Hirst, Eric. TRANSPORTATION ENERGY CONSERVATION: OPPORTUNITIES AND POLICY ISSUES. Transportation Journal, v. 13(3), Spring 1974: 42-52. HQ, 10A

 History, conservation opportunities, implementation.
- 60. HOW SHALL WE CONSERVE ENERGY? Technology Review, v. 76(4), Feb. 1974: entire issue. HQ, 10A
- 61. National Petroleum Council, Committee on Energy Conservation.
 POTENTIAL FOR ENERGY CONSERVATION IN THE UNITED STATES: 19741978. Washington, 1974. 129 p. (TJ163.4.U6N385) HQ, 10A
 Report in response to Secretary of the Interior's request
 to analyze possibilities for conservation, determine
 patterns of future energy use, and assess impact of such
 measures in future energy posture. Work assigned to six
 task groups and divided into two time frames: 1974-1978,
 and 1979-1985 and beyond.
- ENERGY CONSERVATION IN THE UNITED STATES: 1974-1978 TRANS-PORTATION. A report of the Transportation Task Group. Washington, 1974. 152 p. (TJ163.4.U6N383) HQ, 10A

 Appraises short-term measures applicable to six basic transport modes: highways, airways, railways, waterways, urban public transit and pipelines.
- CONSERVATION IN THE UNITED STATES: 1979-1985. Washington, 1975. 204 p. (TJ163.4.U6N385) HQ, 10A
- 64. National Research Council, Transportation Research Board.

 TRANSPORTATION ENERGY CONSERVATION AND DEMAND. Washington, 1976.
 68 p. Transportation Research Record No. 561. (TE5.3.H5A31 no. 561)
 HQ

 Six reports prepared for the 54th annual meeting of the
 Transportation Research Board on energy, the automobile,
 and gasoline consumption.
- 65. Polishuk, Paul. REVIEW OF THE IMPACT OF TELECOMMUNICATIONS SUBSTITUTES FOR TRAVEL. IEEE Transactions on Communications, v. COM-23(10), Oct. 1975: 1089-1098. HQ, 10A

 Prototype systems in the United States; federally funded research activities; evaluation of the social and economic impacts; areas for further research.
- 66. Public Technology, Inc. ENERGY CONSERVATION: A MANAGEMENT REPORT FOR STATE AND LOCAL GOVERNMENTS. Washington, National Science Foundation, Mar. 1975. 7 p. (TJ163.4.U6P83) HQ
 Guidelines for planning and implementing conservation programs, prepared under the Research Applied to National Needs (RANN) program.

- 67.

 GUIDE FOR STATE AND LOCAL GOVERNMENTS. Washington, 1975. 113 p. (TJ163.4.U6P832) HQ

 Presents synthesis of existing technologies, a guide to what is now known about energy conservation.
- 68. Rocky Mountain Energy Economics Institute, 10th. CONSERVATION AND THE CHANGING DIRECTION OF ECONOMIC GROWTH. Bernhard J. Abrahamson, ed. Boulder, Colo., Westview Press, 1978. xviii, 151 p. (HE9502.U52R63) HQ

 Papers presented at the 10th Institute, June 26-29, Aspen, Colo., sponsored by the Rocky Mountain 0il and Gas Association and the Denver Research Institute.
- 69. SPECIAL ENERGY CONSERVATION ISSUE. Catalyst for Environmental Quality, v. 6(4), 1979: 6-32. HQ, 10A
 Costs, technology, ways to conserve.
- 70. TRANSPORTATION ENERGY CONSERVATION: TOOLS TO MEET THE NATIONAL OBJECTIVE. Sarah J. LaBelle, ed. Summary of meeting, Argonne National Laboratory, Feb. 12, 1976. Argonne, Ill., 1976. iii, 38 1. ANL-76xx-4. (TJ163.3.T83) HQ

 Chicago area transportation planners and researchers, and Energy Research and Development Administration conservation representatives explore current situation in urban transportation energy use in terms of strategies available to reduce energy consumption in the future.
- 71. U.S. Citizens' Advisory Committee on Environmental Quality. CITIZEN ACTION GUIDE TO ENERGY CONSERVATION. Washington, 1973. 64 p. (TJ163.4.U6U44) HQ

 Directed to citizen leaders, public officials, and others in a position to promote understanding of need for energy conservation and to encourage practice on a broad scale by the American people. Brings together a factual account of the problem and some well-documented steps to do something about it.
- 72. U.S. Dept. of Transportation. FUEL ECONOMY IMPROVEMENT PROGRAM.
 Prepared for the Energy Resources Council. Washington, 1975. 38 1.
 (TL151.6.U715) HQ
- 73. U.S. Federal Energy Administration, Office of Contingency Planning. PROPOSED ENERGY CONSERVATION CONTINGENCY PLAN: EMERGENCY WEEKEND GASOLINE AND DIESEL FUEL RETAIL DISTRIBUTION RESTRICTIONS: ECONOMIC IMPACT ANALYSIS, ENVIRONMENTAL IMPACT ASSESSMENT. Washington, 1977. 248 p. (HD9502.U52U5822) HQ
- 74. U.S. Office of Emergency Preparedness. THE POTENTIAL FOR ENERGY CONSERVATION: A STAFF STUDY. Washington, Executive Office of the President, 1972. 243 p. (TJ163.4.U6U5) HQ, 10A

 Some of recommended realizable conservation measures involving transportation are shifting intercity freight from highway to rail, intercity passengers from air to ground, and urban passengers from automobiles to mass transit.

CONSUMPTION

- 75. California Institute of Technology, Pasadena, Calif. CALTECH SEMINAR SERIES ON ENERGY CONSUMPTION IN PRIVATE TRANSPORTATION. Washington, U.S. Dept. of Transportation, June 1974. 330 p. DOT-TST-75-7. (HE18.5.A39 no. DOT-TST-75-7) (IR 75-0443) HQ, 10A PB-235 348 Search for means of reducing huge amounts of valuable oil burned in private cars, primarily by solution of technological problems.
- trative summary. Washington, U.S. Dept. of Transportation, 1974.
 29 p. DOT-TST-75-6. (HE18.5.A39 no. DOT-TST-75-6) HQ PB-235 349
 Organizational details and observations on attendance at and value of the series.
- 77. CERTIFICATION TESTING VS. CUSTOMER DRIVING: A FUEL MEASUREMENT DILEMMA. Automotive Engineering, v. 87(2), Feb. 1979: 52-58. HQ, 10A

 Problems exist in search for good estimates of new-car

Problems exist in search for good estimates of new-car fuel consumption rates.

- 78. Clark, Philip H. ENERGY CONSUMPTION AND THE AIR TRANSPORTATION SYSTEM IN METROPOLITAN WASHINGTON: IMPLICATIONS FOR THE FUTURE. Washington, Metropolitan Washington Council of Governments, 1976. iii, 44 p. (TL726.4.W3C63) 10A

 Focuses on energy needs of Washington National and Dulles International airports, but also considers Andrews Air Force Base and region's general aviation airports.
- 79. Cope, Edwin M. THE EFFECT OF SPEED ON TRUCK FUEL CONSUMPTION RATES. Washington, U.S. Federal Highway Administration, 1974. 15 p. (TL151.6.C67) HQ PB-226 072

 When speeds of large trucks are increased, fuel consumption per mile also increases.
- A COMPARATIVE ANALYSIS. Published for Resources for the Future.
 Baltimore, Md., Johns Hopkins University Press, 1977. xvi, 282 p.
 (HD9502.A2D28) HQ

Analyzes variations in energy consumption among nine highly industrialized countries; considers sectors such as household-commercial, transport, industrial.

81. Easingwood-Wilson, D., and others. AN INSTRUMENTED CAR TO ANALYSE ENERGY CONSUMPTION ON THE ROAD. Crowthorne, England, Transport and Road Research Laboratory, 1977. 25 p. TRRL Laboratory Report 787. (TE5094.G7A372 no. LR 787) HQ

Describes instrumented car capable of gathering realistic data in a wide variety of surroundings, from motorways to heavily congested urban roads.

- 82. Evans, Leonard. DRIVER BEHAVIOR EFFECTS ON FUEL CONSUMPTION IN URBAN DRIVING. Human Factors, v. 21(4), Aug. 1979: 389-398. 10A With drivers instructed to drive other than normally in traffic, for each 1% of increase (decrease) in trip time, fuel consumption increases (decreases) by 1.1%.
- 83. General Motors Corporation. COMMENTS BY GENERAL MOTORS CORPORATION TO THE FEDERAL ENERGY ADMINISTRATION ON PASSENGER CAR FUEL ECONOMY. Warren, Mich., Aug. 1974. 378 p. (TL151.6.G47) HQ

 Forecasts decline in gasoline usage in next 10 years (due to small car demand and increased fuel efficiency) which will provide time for needed research in alternative fuels and engines.
- 84. Greene, David L. AN INVESTIGATION OF THE VARIABILITY OF GASOLINE CONSUMPTION AMONG STATES. Prepared for the U.S. Dept. of Energy, Office of Conservation. Oak Ridge, Tenn., Oak Ridge National Laboratory, 1978. x, 51 p. ORNL-5391. (TL151.6.G84) HQ
- 85.

 . STATE DIFFERENCES IN THE DEMAND FOR GASOLINE:
 AN ECONOMETRIC ANALYSIS. Energy Systems and Policy, v. 3(2), 1979:
 191-212. HQ
 Report on household highway gasoline use at the state level.
- 86. Hirst, Eric. ENERGY CONSUMPTION FOR TRANSPORTATION IN THE U.S. Report produced as part of the ORNL-NSF Environmental Program; work supported by the National Science Foundation RANN Program. Oak Ridge, Tenn., Oak Ridge National Laboratory, 1972. 34 p. ORNL-NSF-EP-15. (QC770.U6A3 ORNL-NSF-EP-15) HO
- 87. Honeywell, Inc., Traffic Management Center, Hopkins, Minn. FUEL CONSUMPTION STUDY: URBAN TRAFFIC CONTROL SYSTEM (UTCS), SOFTWARE SUPPORT PROJECT. Washington, U.S. Federal Highway Administration, Feb. 1976. 66 p. FHWA-RD-76-81. (TE662.A3 no. FHWA-RD-76-81) HQ PB-259 003

Computer simulation testing of traffic control scenarios to determine effects of various traffic conditions, network configurations and traffic engineering techniques on consumption of fuel by vehicles in a network.

- 88. INTERNATIONAL COMPARISONS OF ENERGY CONSUMPTION. Proceedings of a workshop sponsored by Resources for the Future and the Electric Power Research Institute. Washington, Resources for the Future, 1978. xxxiii, 218 p. Research Paper R-10. (HD9502.I78) HQ

 One of a series of jointly sponsored projects relative to energy consumption.
- 89. Massachusetts Institute of Technology, Cambridge, Mass. CHANGES IN ENERGY CONSUMPTION, 1963-1980. Washington, National Science Foundation, Feb. 1973. 111 p. (IR 74-1362) 10A PB-227 580

 Analysis of changes indicates technology of energy use efficiency not improving as rapidly as in past; by 1980 technology will actually result in increased use.

- 90. The Mitre Corporation. POTENTIAL FUEL CONSERVATION FOR TRUNK AIR CARRIERS. Prepared for the Office of Systems Engineering Management, U.S. Federal Aviation Administration. McLean, Va., Feb. 1975. 35 p. MTR-6818. (IR 75-0334) 10A.

 Estimates magnitude of excess fuel consumption and relative contributions of air traffic delay, weather, and airline operating policy.
- 91. National Research Council, Committee on Measurement of Energy Consumption. ENERGY CONSUMPTION MEASUREMENT: DATA NEEDS FOR PUBLIC POLICY. Washington, National Academy of Sciences, 1977. ix, 113 p. (HD9502.U52N39) HQ
- 92. Oak Ridge National Laboratory. ECONOMETRIC ANALYSIS OF THE DEMAND FOR GASOLINE AT THE STATE LEVEL. Prepared for U.S. Department of Energy, Office of Conservation. Oak Ridge, Tenn., July 1978. 129 p. ORNL/TM-6326. (TL151.6.G83) HQ

 Detailed description of investigation into factors influencing levels of highway gasoline use per household and per Vehicle at the state level. Considerable variability in consumption rates is documented.
- 93. THE REAL GAS USERS. Cars & Trucks, v. 49(7), July 1977: 40. HQ
 Which state has the worst track record in gas consumption.
 The answer depends on how the figures are broken down. In
 total gallons consumed, California devours the biggest slice,
 Hawaii the smallest.
- 94. Reynolds, Reid. LONG DAY'S JOURNEY. American Demographics, v. 1(3), Mar. 1979: 42-43. HQ

 More than half of work force still travels to work alone; chart shows major modes of transport to work.
- 95. Ross (Howard R.) Associates, Menlo Park, Calif. ENERGY CONSUMPTION OF PRT SYSTEMS. Los Angeles, Calif., Southern California Association of Governments, Mar. 1974. 24 p. (TA1205.R68) HQ

 A parametric analysis of factors affecting energy consumption in personal rapid transit.
- 96. Sano, Masahide and Yasubei Oguchi. THE RELATION BETWEEN MAN-VEHICLE TRAFFIC FLOW AND FUEL CONSUMPTION OF AUTOMOBILES. IATSS Research (International Association of Traffic and Safety Sciences) (Japan), v. 1, 1977: 91-100. HQ

 Fuel economy, its relation to city driving environment, influence of pollution, and related problems.
- 97. Soot, Siim and Ashish Sen. METROPOLITAN WORK-TRIP ENERGY CONSUMPTION PATTERNS. Traffic Quarterly, v. 33(2), Apr. 1979: 275-295. HQ, 10A Examines pattern of energy consumption for journeys-to-work in a metropolitan area; identifies population and geographic variables that affect energy use.

- 98. SUPPLYING GASOLINE FOR TOMORROW'S CARS. Automotive Engineering, v. 85(9), Sept. 1977: 46-51. HQ, 10A

 Before 1985, U.S. gasoline consumption is expected to increase slightly, level off, and then begin a slow decline. Gasoline shortages are not foreseen, but changing product demands and uncertain government regulations will present challenging problems to refiners.
- 99. Travis, Claude. MEASURING FUEL ECONOMY ON THE ROAD. Commercial Car Journal, v. 136(1), Jan. 1979: 98-102. HQ

 Joint effort of the Society of Automotive Engineers and the U.S. Dept. of Transportation is aimed at monitoring fuel mileage by heavy-duty and straight trucks.
- 100. U.S. National Aviation Facilities Experimental Center, Atlantic City, N. J. TERMINAL AREA DELAY AND FUEL CONSUMPTION ANALYSIS. Washington, U.S. Federal Aviation Administration, Jan. 1979. 124 p. FAA-EM-78-20. (IR 79-0189) HQ AD-A064 444

 The purpose of this project was to develop estimates of excess mileage flown in the terminal area, to estimate excess fuel burn due to air traffic control delay maneuvers, and to develop a method to analyze the effect of future ATC concepts to reduce delay.
- 101. U.S. Transportation Systems Center, Cambridge, Mass. HIGHWAY FUEL CONSUMPTION MODEL (VERSION I). Washington, U.S. Dept. of Transportation, Apr. 1974. 128 p. DOT-TSC-OST-73-43. (HE18.5.A35 no. DOT-TSC-OST-73-43) HQ PB-231 880

 Provides tool for determining impact changes in the mix (by fuel consumption category) of new vehicles annually would have on total fuel consumption.
- 102. Voorhees (Alan M.) & Associates, Inc. GUIDELINES TO REDUCE ENERGY CONSUMPTION THROUGH TRANSPORTATION ACTIONS. Prepared for the Urban Mass Transportation Administration, U.S. Dept. of Transportation. McLean, Va., 1974. 85 p. UMTA-IT-06-0092-74-2. (HD9566.V66) HQ PB-235 983.
 - Aid to local transportation planners, traffic engineers, and administrators, especially on short-term basis.
- 103. Williams, T. ENERGY LOSSES IN HEAVY COMMERCIAL VEHICLES. Crowthorne, England, Transport and Road Research Laboratory, 1977. 47 p.
 TRRL Supplementary Report 329. (TE5094.G7A374 no. 329) HQ
 Examines factors affecting fuel consumption such as engine and alternative means of propulsion, tires, and aerodynamic shaping.

ECONOMICS

- 104. Bearden, William O., and others. CONSUMER PREFERENCE: GASOLINE RATIONING OR HIGHER PRICES? Atlanta Economic Review, v. 27(6), Nov.-Dec. 1977: 43-46. HQ

 Attitudes toward gasoline rationing and higher gasoline costs examined in terms of segments of conservation-oriented consumers.
- 105. Charles River Associates, Inc., Cambridge, Mass. PRICE ELASTICITIES OF DEMAND FOR TRANSPORTATION FUELS. Washington, U.S. Federal Energy Administration, May 1976. 14, xiii, 348 p. (HE336.E3C53) HQ, 10A Develops estimates of price elasticities of gasoline, diesel, and jet fuel consumption for use in determining effectiveness of price policies for fuel conservation.
- 106. CONSERVING TRANSPORT ENERGY: PENNIES AND NICKELS. Technology Review, v. 76(7), June 1974: 54-55. HQ, 10A

 Close scrutiny of gasoline saving proposals produces results only in pennies, nickels, and dimes.
- 107. COST OF 1985 RULES PUT AT \$945. Automotive News, v. 54(4757), May 21, 1979: 10. HQ

 Meeting 1985 fuel economy, safety and emission standards could add \$945 to average car cost, not reflecting inflation.
- 108. Farmer, Richard. MOTOR GASOLINE PRICES THROUGH 1980 UNDER CONTINUED DOE PRICE CONTROL. Washington, U.S. Dept. of Energy, Energy Information Administration, Jan. 10, 1979. 34 p. (HD9564.F38) HQ
- 109. Fulton, Ken. COSTLIER FUEL, MORE EXPENSIVE ENGINES? Flight International, v. 105(3387), Feb. 7, 1974: 179. 10A

 Impact of fuel shortage on aviation.
- 110. Galliker, J. Paul. STATE ENERGY FUEL PRICES BY MAJOR ECONOMIC SECTOR FROM 1950 THROUGH 1977: PRELIMINARY REPORT AND DOCUMENTATION.
 Washington, U.S. Dept. of Energy, Energy Information Administration, 1979. vi. 136 p. DOE/EIA-0190. (HD9564.G36) HQ
- 111. Hass, Jerome E., and others. FINANCING THE ENERGY INDUSTRY. Cambridge, Mass., Ballinger Publishing Co., 1974. 138 p. (HD9564.H28) HQ, 10A
- 112. HIGHER OIL PRICES AND THE WORLD ECONOMY: THE ADJUSTMENT PROBLEM. Edward R. Fried and Charles L. Schultze, eds. Washington, The Brookings Institution, 1975. xiii, 284 p. (HD9560.4.H54) HQ, 10A Effects of quadrupled oil prices on the U.S., Western Europe, Japan, developing countries, the international financial system, and the international oil market.

- 113. HOW ENERGY AFFECTS THE ECONOMY. A. Bradley Askin, ed.
 Lexington, Mass., Lexington Books, 1978. xiii, 133 p.
 (HD9502.U52H69) HQ
 Collection of papers emphasizing relationship between
 energy sector and the general economy.
- 114. Jacops, Marie-Annick. AIR TRANSPORT CONFRONTED WITH THE INCREASE IN FUEL COSTS. ITA (Institut Du Transport Aérien) Study, 1974/7-E. 91 p. 10A
- 115. Massachusetts Institute of Technology, Cambridge, Mass.
 MULTIREGIONAL ECONOMIC IMPACTS OF ENERGY AND TRANSPORTATION POLICIES.
 Prepared for the University Research Program, U.S. Department of
 Transportation. Washington, U.S. Dept. of Transportation, 1974.
 viii, 118 p. DOT Report No. 8. (HC106.6.P654) PB-244 586. HQ
 Prototype study on use of Multiregional Input-Output (MRIO)
 models in systematic analysis of regional economic policies in
 general and of energy and transportation policies in particular.
- 116. Merklein, Helmut A. ENERGY ECONOMICS. Houston, Tex., Gulf Publishing Co., Book Division, 1977. ix, 230 p. (HD9560.4.M48) HQ
- 117. Miller, Roger LeRoy. THE ECONOMICS OF ENERGY: WHAT WENT WRONG.
 New York, William Morrow & Co., Inc., 1974. 131 p. (HD9540.6.M54)
 HQ, 10A
 A teacher and professional economist writes for layman,
 without specialized jargon.
- 118. Murphy, Joseph S. THE ABCS OF AIRLINE ECONOMICS. Air Transport World, v. 11(11), Nov. 1974: 92. 10A

 Maintains price of fuel will ruin airline industry unless government intervenes.
- . THE AIRLINES AND THE OIL CRISIS. Air Transport World, v. 12(8), Aug. 1975: 54. 10A
 Airlines need special price relief.
- 120. Rek, Bron. JET FUEL: COUNTING THE COST. Flight International, v. 115(3660), May 12, 1979: 1566-1567. 10A
 Will rising prices spoil traffic boom?

crude oil prices." - author.

121. Rifaï, Taki. THE PRICING OF CRUDE OIL; ECONOMIC AND STRATEGIC GUIDELINES FOR AN INTERNATIONAL ENERGY POLICY. New York, Praeger, 1974. xvii, 356 p. (HD9560.6.R54) HQ, 10A

"'Crude oil prices - and products' prices - should represent the starting point, not the outcome, of any meaningful economic analysis of the industry, and this fundamental change in philosophy is the predominating feature of this survey's informal approach to

122. Stucker, James Perry. THE ECONOMIC IMPACT OF AUTOMOBILE TRAVEL COST INCREASES ON HOUSEHOLDS. Santa Monica, Calif., Rand Corporation, July 1977. xiv, 67 p. R-1842-NSF/FEA. (Q180.U5R25 no. R-1842-NSF/FEA) HO

Effects of governmental policy options that, directly or indirectly, cause the costs of owning and operating an automobile to increase.

- 123. Tallon, Peter. AVIATION FUEL: CAN THE RISING COSTS BE ABSORBED? Interavia, v. 34(2), Feb. 1979:167-169. 10A

 A rise of 15-20% expected by 1985.
- 124. United Airlines, San Francisco, Calif. STUDY OF COST/BENEFIT TRADEOFFS FOR REDUCING THE ENERGY CONSUMPTION OF THE COMMERCIAL AIR TRANSPORTATION SYSTEM. Moffett Field, Calif., U.S. National Aeronautics and Space Administration, Ames Research Center, June 1976. x, 185 p. NASA CR-137891. (IR 78-0126) 10A N76-31079

Economic studies encompassing three options: 1) retrofit modifications of present aircraft; 2) fuel-efficient derivations of existing production aircraft; and 3) new advanced turboprop.

- 125. U.S. Congress, Senate, Committee on Energy and Natural Resources.
 THE ECONOMIC IMPACT OF OIL IMPORT REDUCTIONS. Committee Print
 No. 95-158. 95th Congress, 2d session. Washington, U.S. Govt.
 Printing Office, 1978. viii, 31 p. (HD9502.U52U44) HQ
- 126. U.S. Federal Aviation Administration, Office of Aviation Policy. OIL PRICE DECONTROL IMPACT ON THE AIR TRANSPORT INDUSTRY:

 AN OVERVIEW. Washington, June 1975. 35 p. (IR 76-1220) 10A
 Statement of issues involved and positions of interested organizations and government agencies.
- 127. U.S. Federal Energy Administration, Office of Regulatory Programs. PROPOSED ENERGY CONSERVATION CONTINGENCY PLAN: EMERGENCY COMMUTER PARKING MANAGEMENT AND CARPOOLING INCENTIVES. Washington, Sept. 1976. 212 p. (HD9502.U52U582) HQ

 Economic impact analysis and environmental impact assessment.
- 128. U.S. National Aeronautics and Space Administration, Ames Research Center, Moffett Field, Calif. UNITED STATES TRANSPORTATION FUEL ECONOMICS (1975-1995). Washington, U.S. National Aeronautics and Space Administration, Apr. 1975. 30 p. NASA TM X-3197. (IR 76-1430) 10A N75-21154/OG1

Reviews U.S. energy resource base, assesses portable fuelprocessing alternatives and evaluates economically selected future aircraft fuel options (JP fuel, liquid methane, and liquid hydrogen).

FORECASTS

- 129. ADVANCING TRANSPORT AIRCRAFT TECHNOLOGY TOWARDS 2000. Interavia, v. 32(12), Dec. 1977: 1219-1223. 10A

 Technological process will be constrained by outside influences such as a rapid rise in fuel costs and need to conserve energy.
- 130. Air Transport Association of America. UNITED STATES AIRLINE INDUSTRY TURBINE FUEL FORECAST, 1978-1982. Washington, Jul. 1978. 19 p. (TL704.7.A58) 10A

 Annual forecast by Energy and Fuels Committee, prepared from data furnished by ATA member airlines and about 25 non-member airlines.
- 131. Davis, W. Jackson. ENERGY: HOW DWINDLING SUPPLIES WILL CHANGE OUR LIVES. Futurist, v. 13(4), Aug. 1979: 258-261, ff. HQ, 10A
- 132. Delta Research Corporation, Arlington, Virginia. WORLDWIDE TRANS-PORTATION/ENERGY DEMAND FORECAST, 1975-2000. Oak Ridge, Tenn., Oak Ridge National Laboratory, Oct. 1978: xi, 95 p. ORNL/Sub-78/135/36/1. (HD9540.5.A98) HQ, 10A

 Results highlight certain trends and suggest areas for further investigation but should not be regarded as definitive or final.

investigation but should not be regarded as definitive or final. One of series of reports supporting ORNL's transportation energy program.

133. East-West Gateway Coordinating Council. SOME CONSIDERATIONS IN TRANSPORTATION ENERGY FORECASTING. Sponsored by U.S. Urban Mass Transportation Administration and U.S. Federal Highway Administration. St. Louis, St. Louis Area Council of Governments, 1976. 22 p. (HD9502.E38) HQ

Purpose of report is to supply decision-makers with information on transportation energy use and factors important in projecting future requirements for the transportation systems they create.

- 134. ENERGY FORCING MAJOR CHANGES IN TRANSPORTATION MARKET BY 1995.

 Metropolitan, v. 73(5), Sept.-Oct. 1977: 89-90. HQ

 Substantial gains in local rail, commuter trolley, and local bus transport foreseen.
- 135. ENERGY FUTURE: THE REPORT OF THE HARVARD BUSINESS SCHOOL ENERGY PROJECT. Robert Stobaugh and Daniel Yergin, eds. New York, Random House, 1979. x, 353 p. (HD9502.U52E742) HQ, 10A
- 136. ENERGY, THE NEXT 20 YEARS. Cambridge, Mass., Ballinger Publishing Co., 1979. xxviii, 628 p. (HD9502.U52E763) HQ
 Report by study group sponsored by the Ford Foundation, administered by Resources for the Future.
- 137. Exxon Corporation. WORLD ENERGY OUTLOOK: A BACKGROUND PAPER. Prepared by the Public Affairs Department. New York, 1978. 47 p. (HD9502.A2E99) HQ

Examines world energy outlook to 1990 as an aid to planning and as a means of assessing implications of the changing world energy environment.

- 138. Griffin, James M. ENERGY CONSERVATION IN THE OECD, 1980-2000. Cambridge, Mass., Ballinger Publishing Co., 1979. xiii, 297 p. (HD9502.072G85) HQ
- 139. Hayes, Earl T. ENERGY RESOURCES AVAILABLE TO THE UNITED STATES, 1985 TO 2000. Science, v. 203(4377), Jan. 19, 1979: 233-239. HQ, 10A

 Petroleum liquids, natural gas, coal, nuclear energy, solar, hydropower.
- 140. McHenry, John P., Jr., and others. WORLD ENERGY: A MANAGEABLE DILEMMA. Harvard Business Review, v. 57(3), May-June 1979: 150-161. HQ, 10A

 In spite of predictions of fuel shortages and crippling costs, this is a forecast of stability in world energy supplies and prices.
- 141. MAJOR SHIFT IN TRANSPORTATION MODES FORESEEN OVER NEXT 25 YEARS.

 American Highway & Transportation Magazine, v. 54(3), July 1975: 29. HQ

 Market research study concludes energy conservation will bring about shift by year 2000.
- 142. The Mitre Corporation. ANALYSIS OF ENERGY PROJECTIONS FOR INFRA-STRUCTURE DEVELOPMENT REQUIREMENTS. McLean, Va. Feb. 1977. vii, 70 p. MTR-7455. FHWA-PL-77-010. (HD9502.U52L45) HQ PB-266 419 Near term to 1985 demands.
- 143. National Transportation Policy Study Commission. NATIONAL TRANSPORTATION POLICIES THROUGH THE YEAR 2000: EXECUTIVE SUMMARY. Washington, 1979. vii, 32 p. (HE206.2.N385) HQ, 10A
 Highlights chapters of final report, states 33 major recommendations.
- . NATIONAL TRANSPORTATION POLICIES

 THROUGH THE YEAR 2000: FINAL REPORT. Washington, June 1979. xxvii,
 527 p. (HE206.2.N384) HQ, 10A

 Eighty specific recommendations to improve system to meet growing demand.
- 145. Noreng, Øystein, OIL POLITICS IN THE 1980s: PATTERNS OF INTERNATIONAL COOPERATION. Council on Foreign Relations: 1980s Project. New York, McGraw-Hill, 1978. xvii, 171 p. (HD9502.5.N78) HQ

 Recommendations for an accommodation between the world's major oil-exporting and -importing countries, proposing the framework of a negotiated agreement.
- 146. Ortiz, René G. THE WORLD ENERGY OUTLOOK IN THE 1980s AND THE ROLE OF OPEC. Journal of Energy and Development, v. 4(2), Spring, 1979: 197-211. HQ
- 147. Ott, James. OUTLOOK FOR FUEL DAMPENS GROWTH FORECAST OF FAA.

 Aviation Week and Space Technology, v. 111(18), Oct. 29, 1979: 27-28.

 HQ, 10A

Uncertainty about fuel availability and prices have dampening effect on traffic growth forecast by the Federal Aviation Administration for 1980-1991.

- 148. Rice, Richard A. SYSTEM ENERGY AND FUTURE TRANSPORTATION. Technology Review, v. 74(3), Jan. 1972: 31-37. HQ, 10A

 Future petroleum commitments; urban transport energy needs; projected total energy and transport outlook; human energy as a transport standard; long-run energy implications.
- 149. Stanford Research Institute, Menlo Park, Calif. TRANSPORTATION IN AMERICA'S FUTURE: POTENTIALS FOR THE NEXT HALF CENTURY. Part 1: Societal context. Washington, U.S. Dept of Transportation, June 1977. 125 p. DOT-TPI-20-77-21 (HE308.T84 v. 1) (IR 77-0782) HQ, 10A PB-270 467

Four potential socioeconomic futures for the United States and their implications through 2025. Part 1 presents scenarios and analyses of energy, demographic, economic, and urban implications of each. Part 2 provides demand and technology forecasts.

- 150. Part 2: Transportation forecasts. Washington, U.S. Dept. of Transportation, June 1977. 333 p. DOT-TPI-20-77-21. (HE308.T84 v.2) (IR 77-0783) HQ, 10A PB-270 468
- 151. UNITAR Conference on Energy and the Future, 1st. THE FUTURE SUPPLY OF NATURE-MADE PETROLEUM AND GAS: TECHNICAL REPORTS. An international conference sponsored by the United Nations Institute for Training and Research (UNITAR) and the International Institute for Applied Systems Analysis (IIASA) as the first UNITAR Conference on Energy and the Future and the second IIASA Conference on Energy Resources, 5-16 July, 1976, Schloss Laxenburg, Laxenburg, Austria. New York, Pergamon Press, 1977. xxxix, 1046 p. (TN863.U75) HQ
- 152. U.S. Central Intelligence Agency. THE INTERNATIONAL ENERGY SITUATION, OUTLOOK TO 1985. Washington, 1977. 18 p. ER 77-10240. (HD9502.A2U55) HO
- 153. U.S. Dept. of the Interior. UNITED STATES ENERGY THROUGH THE YEAR 2000. Washington, Dec. 1972. 66 p. (IR 74-1361) 10A PB-227 799 Assessment and forecast of fuel supply and demand. More options will exist after 1985 than in near-term.
- 154. U.S. Library of Congress, Congressional Research Service. U.S. ENERGY DEMAND AND SUPPLY, 1976-1985: LIMITED OPTIONS, UNLIMITED CONSTRAINTS. Prepared for use by the Subcommittee on Energy and Power of the Committee on Interstate and Foreign Commerce, House of Representatives, 95th Congress, 1st Session. Committee Print 95-43. Washington, U.S. Govt. Printing Office, 1978. viii, 146 p. (TJ163.25.U6U68) HQ
- 155. Warren, Charles, and others. FORECAST 2000: BRIGHTER ENERGY AND ECONOMIC GROWTH. Environment, v. 21(5), June 1979: 25-30, ff. HQ, 10A

- 156. Workshop on Alternative Energy Strategies. ENERGY DEMAND STUDIES, MAJOR CONSUMING COUNTRIES: ANALYSES OF 1972 DEMAND AND PROJECTIONS OF 1985 DEMAND. First technical report of the Workshop. Cambridge, Mass., Massachusetts Institute of Technology Press, 1976. xiv, 553 p. (HD9502.A2W66 1976) HQ, 10A

 Workshop involved 75 leaders of business, industry, government, and academia, representing 15 countries.
- . ENERGY: GLOBAL PROSPECTS, 1985-2000.

 New York, McGraw Hill Book Co., 1977. xxv, 291 p. (TJ163.2.W78 1977)

 HQ, 10A

 Final report of the Workshop.
- . ENERGY SUPPLY-DEMAND INTEGRATIONS
 TO THE YEAR 2000: GLOBAL AND NATIONAL STUDIES. Cambridge, Mass.,
 Massachusetts Institute of Technology Press, 1977. xiv, 706 p.
 (HD9502.A2W66 1977a) HQ, 10A
 Third technical report of the Workshop. Chiefly tables.
- . ENERGY SUPPLY TO THE YEAR 2000:

 GLOBAL AND NATIONAL STUDIES. Cambridge, Mass., Massachusetts Institute of Technology Press, 1977. xvi, 406 p. (HD9502.A2W66 1977) HQ, 10A Second technical report of the Workshop.
- 160. World Energy Conference, Conservation Commission. WORLD ENERGY: LOOKING AHEAD TO 2020. New York, IPC Science and Technology Press, 1978. xviii, 274 p. (HD9502.A2W784) HO
- 161. WORLD ENERGY RESOURCES, 1985-2020: EXECUTIVE SUMMARIES OF REPORTS ON RESOURCES, CONSERVATION AND DEMAND TO THE CONSERVATION COMMISSION OF THE WORLD ENERGY CONFERENCE. New York, IPC Science and Technology Press, 1978. xii, 249 p. (TJ163.15.W78) HQ

FUELS

162. Atlantic Richfield Company, Harvey, Ill. SYNTHESIS AND ANALYSIS OF JET FUEL FROM SHALE OIL AND COAL SYNCRUDES. Washington, U.S. National Aeronautics and Space Administration, Nov. 1976. 62 p. NASA CR-135112. (IR 77-0270) 10A N77-12230 On basis of analysis of 32 jet fuel samples produced from shale oil and coal syncrudes, shale oil preferred to coal as petroleum substitute for jet fuel production.

.....

- 163. THE AVAILABILITY OF JET FUEL TOMORROW AND THE DAY AFTER. Interavia, v. 33(1), Jan. 1978:39-42. 10A

 Based on two papers presented at Royal Aeronautical Society conference, London, 1977.
- 164. Baker, John. AVIATION FUELS PRESENT AND FUTURE. Airport Services Management, v. 18(6), June 1978: 32-33. 10A

 Fuel research advocated in speech before National Air Transportation Association, Apr. 1978.
- 165. Brewer, G. Daniel. LIQUID HYDROGEN -- A LOGICAL CHOICE TO FUEL FUTURE COMMERCIAL AEROPLANES. ICAO Bulletin, v. 31(2), Feb. 1976: 10-14. 10A
- . LIQUID HYDROGEN APPEARS MOST LIKELY CANDIDATE
 TO POWER AIRLINERS AND CORPORATE AIRCRAFT OF THE FUTURE. Professional Pilot, v. 11(8), Aug. 1977: 42-43, ff. 10A
- 167. Chambers, R. S., and others. GASOHOL: DOES IT OR DOESN'T IT PRODUCE POSITIVE NET ENERGY? Science, v. 206(4420), Nov. 16, 1979: 789-795. HQ, 10A
- 168. Chausse, Ron. ALTERNATE ENERGY; LET'S GET ON WITH IT! Private Pilot, v. 12(7), July 1977:20-21. 10A

 Needed a research body like the National Aeronautics and Space Administration for fuel development.
- 169. Churchill, A. V., and others. FUTURE AVIATION TURBINE FUELS. Journal of Aircraft, v. 15(11), Nov. 1978: 731-734. 10A

 Air Force studies on possible alternative fuels.
- 170. Committee for Economic Development, Research and Policy Committee. HELPING INSURE OUR ENERGY FUTURE: A PROGRAM FOR DEVELOPING SYNTHETIC FUEL PLANTS NOW: A STATEMENT ON NATIONAL POLICY. Washington, 1979. iii, 44 p. (TP360.C67) HQ
- 171. ENERGY: FUELS OF THE FUTURE. Time, v. 113(24), June 11, 1979: 72-73, ff. HQ, 10A
- 172. Escher, William J. D. and G. D. Brewer. HYROGEN: MAKE-SENSE FUEL FOR AN AMERICAN SUPERSONIC TRANSPORT. Journal of Aircraft, v. 12(1), Jan. 1975: 3-10. 10A

- 173. GASOHOL AND EVs: PAPER TIGER WITH NO CLAWS. National Petroleum News, v. 71(3), Mar. 1979: 52-53. HQ

 Electric vehicles and alcohol-and-gasoline blends will have little influence on motor fuel demand till 2000.
- 174. GASOHOL: PROBLEMS AND POSSIBILITIES. Motorland, v. 100(3), May-June 1979: 46. HQ

 Tests reveal both advantages and disadvantages.
- 175. Heiman, Grover. AN ENERGY OVERVIEW. Air Line Pilot, v. 46(2), Feb. 1977: 20-23, ff. 10A

 First of a series. This article addresses present U.S. problems with conventional energy resources. Following articles will cover development of alternatives and their application to aviation.
- . AVIATION AND ENERGY ALTERNATIVES. Air Line Pilot, v. 46(3), Mar. 1977: 24-26, ff. 10A

 Energy series, part 2. No substitute on the horizon for petroleum as a source of fuel for jet engines.
- . COAL TO JET FUEL? Air Line Pilot, v. 46(4),

 Apr. 1977: 18-21. 10A

 Energy series, part 3. Coal and oil shale reserves in the United States.
- 178. HYDROGEN FOR ENERGY DISTRIBUTION. Papers presented at a symposium, July 24-28, 1978. Chicago, Institute of Gas Technology, 1979. vii, 656 p. (TP359.H8H94) HO
- 179. International Civil Aviation Organization, Secretary General. FUTURE AVAILABILITY OF AVIATION FUEL. Montreal, 1979. ii, 48 p. ICAO Circular 149-AT/52. (TL704.7.178) 10A
- 180. Joskow, Paul L. and Robert S. Pindyck. SYNTHETIC FUELS. Regulation, v. 3(5), Sept.-Oct. 1979: 18-24, ff. HQ, 10A Should the government subsidize nonconventional energy supplies?
- 181. Larson, George. TURBINE FUELS: AVAILABILITY AND ALTERNATIVES.
 Business and Commercial Aviation, v. 43(3), Sept. 1978: 74-77. 10A
 So far turbine aircraft fuel is available, but now is time
 to consider the future.
- 182. Levy, Robert. HOW FAR CAN GASOHOL GO? Dun's Review, v. 114(1), July 1979: 44-47. HQ, 10A

 Experts question whether gasohol is all it is claimed to be.
- 183. Marzola, D. L. and D. P. Bartholomew. PHOTOSYNTHETIC PATHWAY AND BIOMASS ENERGY PRODUCTION. Science, v. 205(4406), Aug. 10, 1979: 555-559. HQ, 10A

 Sugarcane sugars are directly fermentable to alcohol, indicating possible use as substitute for fossil fuels.

- 184. Masefield, Sir Peter. FUEL STATE: EXPENSIVE. Flight International, v. 105(3407), June 27, 1974: 835-838. 10A

 Survey of world oil supply and prices, and examination of liquid hydrogen as alternative aviation fuel.
- 185. National Air Transportation Association. RESULTS OF THE JUNE, 1979 FUEL SURVEY. Washington, 1979. 8 p. (TL704.7.N382) 10A
- 186. North Atlantic Treaty Organization, Advisory Group for Aerospace Research and Development. AIRCRAFT ENGINE FUTURE FUELS AND ENERGY CONSERVATION. Neuilly-sur-Seine, France, Sept. 1978. 194 p. AGARD-LS-96. (IR 79-0070) 10A
- Neuilly-sur-Seine, France, Jan. 1976. 42 p. AGARD-AR-93. (IR 76-1413)
 10A AD-A021 500
 Plans of NATO countries to increase fuels from all sources and to relieve demand for petroleum products by shifting to other energy sources.
- 188. SPECIAL REPORT: FUELS FOR AMERICA'S FUTURE. U.S. News and World Report, v. 87(7), Aug. 13, 1979: 32-40. HQ, 10A
 Synfuel, coal, gasohol, exotics.
- 189. STANDARDS FOR BIOMASS FUELS WOULD AID NATIONAL ENERGY CONSERVATION REPORT. ASTM Standardization News, v. 7(7), July 1979: 33. HQ, 10A Production from plant matter of alcohol for mixing with gasoline seems best immediate prospect for expanding fuel supply. Corn or other high sugar content substances could be used.
- 190. Sweetman, Bill. FUEL STATE FINITE. Flight International, v. 115(3649), Feb. 24, 1979: 548-550, ff. 10A

 Effect on industry and some technical palliatives.
- . HYDROGEN FUEL STANDS BY FOR TAKE-OFF. New Scientist, v. 82(1158), June 7, 1979: 818-820. HQ, 10A

 Present airliners could be last to be designed around hydrocarbon fuels.
- 192. SYNFUEL TECHNOLOGY: WHERE IT STANDS. Industry Week, v. 202(3), Aug. 6, 1979: 20-22. HQ

 President's proposed program calls for equivalent of 2.5 million barrels of oil a day in synthetics; technologies are in various stages of development.
- 193. SYNTHETIC FUELS: WHAT WE HAVE AND WHAT WE NEED. Technology Review, v. 81(8), Aug.-Sept. 1979: 24-43. HQ, 10A

- 194. Union Carbide Corporation, New York, N.Y. THE ECONOMICS OF LIQUID HYDROGEN SUPPLY FOR AIR TRANSPORTATION. Paper presented at the Cryogenic Engineering Conference, Aug. 10, 1973, Atlanta, Ga. 12 p. (IR 74-0303) 10A

 Develops economic analysis for supply of 2500 ton/day of liquid hydrogen produced from coal and nuclear fuel reserves.
- 195. U.S. Congress, Senate, Committee on Appropriations. ALCOHOL FUELS. Special hearing. 95th Congress, 2nd session. Washington, U.S. Govt. Printing Office, 1978. v, 706 p. (TP358.U55) HQ
- 196. U.S. Dept. of Energy. THE REPORT OF THE ALCOHOL FUELS POLICY REVIEW.
 Washington, June 1979. vii, 119 p. (TP358.U58) HQ
 Summarizes conclusions of a study to assess potential of alcohol
 fuel as an alternative source of energy; sets forth recommendations
 to stimulate use of alcohol fuels from renewable resources.
- 197. U.S. Dept. of Energy, Assistant Director for Energy Technology. THE REPORT OF THE ALCOHOL FUELS POLICY REVIEW: RAW MATERIAL AVAILABILITY REPORTS. Washington, 1979. c. 400 p. DOE/ET-0114/1. (TP358.U583) HQ
- 198. U.S. General Accounting Office. U.S. REFINING CAPACITY: HOW MUCH IS ENOUGH? Report to the Congress by the Comptroller General of the United States. Washington, 1979. vi, 51 p. EMD-78-77. E-178205. (TP690.3.U62) HQ
- 199. U.S. Institute for Basic Standards, Boulder, Colo. HYDROGEN-FUTURE FUEL A BIBLIOGRAPHY. Washington, U.S. National Bureau of Standards, Feb. 1975. 131 p. NBS-TN-664. (IR 76-1286) 10A COM-75-10289 Compilation of references dealing directly and indirectly with possible future use of hydrogen as a fuel.
- . IS HYDROGEN SAFE? Washington, U.S.

 National Bureau of Standards, Oct. 1976. 38 p. NBS-TN-690. (IR 78-0185)

 10A PB-262 551

 Physical and chemical property data for hydrogen compared to methane and gasoline with eye to suitability as synthetic fuel for future generations.
- 201. U.S. Library of Congress, Congressional Research Service. THE PROSPECTS FOR GASOLINE AVAILABILITY: 1974; A BACKGROUND PAPER. Prepared at the request of Henry M. Jackson, Chairman, Committee on Interior and Insular Affairs, United States Senate, pursuant to S. Res. 45, the National Fuels and Energy Policy Study. Committee print. 92nd Congress, 2d Session. Washington, U.S. Govt. Printing Office, 1974. ix, 135 p. (HD9566.U64) HQ

- 202. U.S. National Aeronautics and Space Administration, Langley Research Center, Langley, Va. PROGRESS ON COAL-DERIVED FUELS FOR AVIATION SYSTEMS. Washington, U.S. National Aeronautics and Space Administration, May 1978. 24 p. NASA-TM-78696. (IR 79-0201) 10A N78-25545 Addresses use of alternate fuels such as synthetic aviation kerosene, liquid methane, and liquid hydrogen.
- 203. U.S. Synfuels Interagency Task Force. RECOMMENDATIONS FOR A SYNTHETIC FUELS COMMERCIALIZATION PROGRAM. Submitted to the President's Energy Resources Council. Washington, 1975. 4 v. (HD9546.U75) HO
 - V.1. Overview.
 - V.2. Cost/benefit analysis of alternate production levels.
 - V.3. Technology and recommended incentives.
 - V.4. Draft environmental statement.
- 204. University of Missouri, Mechanical Engineering Department, Rolla, Mo. EVALUATION OF METHYL ALCOHOL AS A VEHICLE FUEL EXTENDER. Washington, U.S. Dept. of Transportation, Aug. 1975. 152 p. DOT-TST-76-50. (HE18.5.A39 no. DOT-TST-76-50) HQ PB-251 108

 Results indicate no substantial changes in emissions or fuel economy can be expected from operating blends of 10% or less in existing vehicles.
- 205. UTILIZATION OF ALTERNATIVE FUELS FOR TRANSPORTATION: proceedings of a symposium sponsored by the U.S. Dept. of Energy, organized and operated by the American Institute of Aeronautics and Astronautics, and the University of Santa Clara, Santa Clara, Calif., June 19-23, 1978. Martin Newman and Jerry Grey, eds. New York, American Institute of Aeronautics and Astronautics, 1979. vii, 238 p. AIAA Aerospace Assessment Series, v. 2. (TP315.U85) HO
- 206. Wade, Nicholas. SYNFUELS IN HASTE, REPENT AT LEISURE. Science, v. 205(4402), July 13, 1979: 167-168. HQ, 10A

 Congress prepares program to make oil from coal.
- 207. Worthy, Ward. SYNFUELS: UNCERTAIN AND COSTLY FUEL OPTION. Chemical and Engineering News, v. 57(35), Aug. 27, 1979: 20-26, ff. HQ

 Most options so far involve coal conversion, oil shale retorting; U.S. has ample resources.

GOVERNMENT

208. Bloch, Carolyn C. FEDERAL ENERGY INFORMATION SOURCES AND DATA BASES. Park Ridge, N.J., Noyes Data Corporation, 1979. x, 115 p. (HD9502.U52B64) HQ

Addresses and capsule descriptions of agencies, departments, offices that deal in some capacity with energy - civilian, military, and legislative. Delineates field of emphasis, services offered, and in some cases availability of publications.

209. Charles River Associates, Cambridge, Mass. INDUCING THE DEVELOP-MENT AND ADOPTION OF SOCIALLY EFFICIENT AUTOMOTIVE TECHNOLOGY. Washington, U.S. Dept. of Transportation, Feb. 1978. vi, 64 p. DOT-TSC-RSPD-78-4. (HE18.5.A353 no. DOT-TSC-RSPD-78-4) HQ PB-279 454

Examines and evaluates federal policies to provide incentives for innovation.

- 210. FAA ANNOUNCES SEVEN-POINT JET FUEL CONSERVATION PLAN. FAA Aviation News, v. 12(9), Jan. 1974: 14. 10A
 Air traffic and other procedures to save fuel.
- 211. GAO ENERGY DIGEST; A BIBLIOGRAPHY ISSUED BY THE COMPTROLLER GENERAL OF THE UNITED STATES. Washington, U.S. General Accounting Office, Sept. 1977. vi, 216 p. (REF Z5853.P83U62) HQ, 10A
 All available unrestricted documents on energy-related matters issued by GAO between July 1972 and Mar. 1977 (audit reports, special studies, letters, speeches, and testimony).
- 212. Gaffney, Gerald P. THE NASA ENERGY CONSERVATION PROGRAM. In:
 American Institute of Aeronautics and Astronautics/Edison Electric
 Institute/Institute of Electrical and Electronics Engineers Conference
 on New Options in Energy Technology, San Francisco, Calif., Aug. 2,
 1977. 3 p. AIAA Paper 77-1005. (TJ163.3.A53 1977 v.2) 10A
 With base year as FY 1973, reviews accomplishments in energyintensive field research facilities and projections to 1985.
- 213. Heiman, Grover. CARTER ENERGY PLAN EFFECT. Air Line Pilot, v. 46(6), June 1977: 32-34, ff. 10A

 Its consequences for the air transportation industry.
- 214. Ponte, J., Jr. 'A' IS FOR AERONAUTICS. Air Line Pilot, v. 48(3), Mar. 1979: 5-10. 10A

 Focuses on NASA's research in two vital areas fuel economy and the human element.
- 215. Rechel, Ralph E. FEDERAL AND STATE INFLUENCES ON TRANSPORTATION FACILITIES, SERVICES, AND FUEL CONSUMPTION. Washington, Conservation Foundation, 1977. 71 p. (HE206.2.R43) HQ

- 216. THOU SHALT NOT GUZZLE. Economist (Great Britain), v. 263(6973), Apr. 23, 1977: 11-12, ff. HQ, 10A
 President Carter's energy plan.
- 217. U.S. Dept. of Transportation. THE ADVISABILITY OF REGULATING ELECTRIC VEHICLES FOR ENERGY CONSERVATION. A report to the Congress and the President from the Secretary of Transportation, Aug. 1976. Washington, 1976. xii, 217 p. (TL220.U75) HQ

 Examines electric and other non-fuel-consuming vehicles and recommends that they not be included under provisions of the Motor Vehicle Information and Cost Savings Act as amended by Title III, Part A of the Energy Policy and Conservation Act.
- PROGRAMS OF THE U.S. DEPARTMENT OF TRANSPORTATION. Washington, 1978.

 12 p. (TJ163.5.T7U54) HQ, 10A

 Programs combine three approaches: improve energy efficiency; shift to more energy-efficient modes; travel less.
- 218a.

 U.S. DEPT. OF TRANSPORTATION. Prepared by the Technology Sharing
 Program. Washington, Dec. 1979. 110 p. (TJ163.5.T7U546) HQ, 10A
 Provides summary of current DOT sponsored energy-related
 research, technical assistance, planning activities, and
 information sources.
- . THE VOICE OF THE TRANSPORTATION

 CONSUMER. A report to the Secretary of Transportation on nationwide consumer public hearings conducted by the Office of Consumer Affairs, 1971-1974. Washington, 1975. 2 v. (HE18.5.A6952) HQ

 Results of a series of fact-finding consumer public hearings to identify transportation needs and provide information to departmental decision-makers.
- 220. U.S. Executive Office of the President, Energy Policy and Planning. THE NATIONAL ENERGY PLAN. Washington, 1977. xiii, 103 p. (HD9502.U52U5) HQ, 10A

Salient features are:

- conservation and fuel efficiency;
- rational pricing and production policies;
- reasonable certainty and stability in government policies;
- substitution of abundant energy resources for those in short supply; and
- development of nonconventional technologies for the future. (See also Item 241.)
- 221. U.S. Federal Aviation Administration. REPORT TO CONGRESS BY THE FEDERAL AVIATION ADMINISTRATION ON PROPOSED PROGRAMS FOR AVIATION ENERGY SAVINGS. Washington, Apr. 1976. 128 p. (IR 76-0640) 10A AD-A023 765 Options available to the FAA and the aviation industry for increasing fuel efficiency.
- 222.

 REPORT TO CONGRESS BY THE FEDERAL AVIATION ADMINISTRATION ON THE ENERGY EFFICIENCY OF AGENCY REGULATIONS.

 Washington, Dec. 1976. 124 p. (IR 77-0088) 10A AD-A034 611

 Concludes that regulations and laws administered by FAA are fuel efficient subject to constraints of safety, environmental control, and existing technology.

- 223.

 REPORT TO CONGRESS ON ENERGY CONSERVATION POLICIES AND PRACTICES BY THE FEDERAL AVIATION ADMINISTRATION.
 Washington, Feb. 1976. 183 p. (IR 76-0381) 10A AD-A021 312
 Historical presentation of policies and practices of the FAA
 as required by the Energy Policy and Conservation Act, P.L.
 94-163.
- 224. U.S. Federal Energy Administration. DIRECTORY OF FEDERAL AGENCIES ENGAGED IN ENERGY RELATED ACTIVITIES. Washington, Oct. 1975. 80 p. (REF HD9502.U52U58) HQ, 10A
- 225. IMPLEMENTATION OF ENERGY CONSERVATION PROGRAMS WITHIN THE FEDERAL GOVERNMENT PURSUANT TO THE ENERGY POLICY AND CONSERVATION ACT. Report to the Congress. Washington, 1977. 94 1. (HD9502.U52U583) HO
- 226.

 Nov. 1974. 443, 337 p. (HD9546.U68) HQ, 10A

 Initiated to evaluate nation's energy problems and provide framework for developing national energy policy.
- 227.

 Office of Energy Information and Analysis.

 FEDERAL ENERGY INFORMATION LOCATOR SYSTEM: ENERGY INFORMATION IN THE
 FEDERAL GOVERNMENT. Washington, Nov. 1976. 458 p. (REF HD9502.U52U585)
 FEA/B-76/492 HQ. 10A
- 228. U.S. General Accounting Office. CONVINCING THE PUBLIC TO BUY THE MORE FUEL-EFFICIENT CARS: AN URGENT NATIONAL NEED. Report to the Congress by the Comptroller General of the United States. Washington, Aug. 10, 1977. vi, 81 p. CED-77-107. B-166506. (TL156.6.U58) HQ

 What the Environmental Protection Agency and the Federal Energy Administration have been doing to disseminate fuel economy figures and mileage guides.
- PROGRAMS COULD SAVE MILLIONS OF GALLONS OF AVIATION FUEL. Report to the Congress by the Comptroller General of the United States.

 Washington, 1977. ix, 66 p. CED-77-98. B-164497(1) (TL704.7.U65) 10A Congressional action is needed to reduce fuel consumed in transporting empty seats. FAA should monitor its fuel conservation programs, hold aircraft on ground when excessive delays encountered at destination airports, evaluate trade-offs between noise abatement and fuel conservation objectives when conflicts occur.
- . ENERGY CONSERVATION COMPETES WITH REGULATORY OBJECTIVES FOR TRUCKERS, INTERSTATE COMMERCE COMMISSION.

 Report to the Congress by the Comptroller General of the United States.

 Washington, Jul 8, 1977. iv, 50 p. CED-77-79. B-187797 (TEA581.U68)

 HO

231.

. AN EVALUATION OF THE NATIONAL ENERGY
PLAN. Report to the Congress by the Comptroller General of the United
States. Washington, Jul. 25, 1977. 182 p. EMD-77-48. B-178205.
(HD9502.U52U615) HO. 10A

Agrees with many specific initiatives of energy plan and offers recommendations to impose others.

- 232.

 . THE FEDERAL GOVERNMENT SHOULD ESTABLISH
 AND MEET ENERGY CONSERVATION GOALS. Report to the Congress by the
 Comptroller General of the United States. Washington, 1978. vi, 109 p.
 EMD 78-38. B-178205. (HD9502.U52U618) HQ
- 233.

 . FUEL SAVINGS AND OTHER BENEFITS ACHIEVED
 BY DIVERTING DEPARTMENT OF DEFENSE PASSENGERS FROM CHARTERED TO SCHEDULED
 OVERSEAS FLIGHTS. Report to the Congress by the Comptroller General
 of the United States. Washington, 1976. ii, 25 p. LCD-75-231.
 B-133025 (TL534.8.C5A2) 10A

Evaluation of Military Airlift Command use of regularly scheduled commercial flights vs. charter flights for DOD passengers reveals benefits warranting expansion of this program.

234.

. MILITARY AND CIVILIAN AIRCRAFT DISCHARGING FUEL IN FLIGHT. Report to the Congress by the Comptroller
General of the United States. Washington, Aug. 17, 1976. iii, 13 p.
LCD-76-447. B-146333 (TL704.7.A2) 10A

Information on current policies and practices of the Federal Aviation Administration, Environmental Protection Agency, Department of Defense, Coast Guard, and three commercial airlines.

- . MORE ATTENTION SHOULD BE PAID TO MAKING THE U.S. LESS VULNERABLE TO FOREIGN OIL PRICE AND SUPPLY DECISIONS. Report to the Congress by the Comptroller General of the United States. Washington, 1978. v, 3, 97 p. EMD-78-24. B-178205. (HD9565.U54) HQ
- 236.

 Report to the Congress by the Comptroller General of the United States.

 Washington, 1978. 121 p. EMD-78-105. B-178205. (TJ163.3.U58) HQ
- 237. U.S. International Trade Commission. THE GAS GUZZLER TAX PROPOSAL:
 A COMPARISON OF ITS IMPACT WITH THAT OF THE FUEL EFFICIENCY INCENTIVE
 TAX PROPOSAL UPON THE FUTURE OF THE U.S. PASSENGER AUTOMOBILE INDUSTRY.
 Report to the U.S. Senate, Committee on Finance, 95th Congress, 1st
 session, on Investigation no. 332-86 under section 332 of the Tariff
 Act of 1930. Committee Print. Washington, U.S. Govt. Printing Office,
 1977. 125 p. (HD9710.U52U49) HO
- 238. U.S. Library of Congress, Congressional Research Service. THE NATIONAL ENERGY PLAN: OPTIONS UNDER ASSUMPTIONS OF NATIONAL SECURITY TEREAT. A report with selected readings. Prepared for the Subcommittee on Energy and Power, Committee on Interstate and Foreign Commerce, House of Representatives, 95th Congress, 2d Session. Committee Print 95-48. Washington, U.S. Govt. Printing Office, 1978. ix, 403 p. (TJ163.25. U6U682) HO

- 239. U.S. Office of Energy Conservation and Environment. FEDERAL ENERGY MANAGEMENT PROGRAM; ANNUAL REPORT. Washington, U.S. Federal Energy Administration, 1974- (TJ163.4.U6U53) HQ, 10A

 Details of energy saving programs of 16 federal agencies.

 Data presented by agency and by types of energy.
- 240. U.S. ORDERS 20 MPG FOR CARS IT PURCHASES. Automotive News, v. 53(4678), Dec. 5, 1977:9. HQ

 Federal Government has formally adopted 20 MPG as its fleetwide fuel economy average for 1978.
- 241. U.S. President. NATIONAL ENERGY PLAN II. Washington, The White House (?), 1979. c.350 p. (HD9502.U52U5) HQ (See also Item 220)
- 242. U.S. Transportation Systems Center, Cambridge, Mass. AUTOMOTIVE ENERGY EFFICIENCY PROGRAM. Papers presented at the Contractors Coordination Meeting, Jan. 15-17, 1975. 272 p. DOT-TSC-OST-75-31 (HE18.5.A35 no. DOT-TSC-OST-75-31) HQ PB-245 808

 Program is Federal Government's major effort to assess capability of automotive industry to significantly improve the fuel economy of production vehicles and assess related socioeconomic effects.
- . BENEFIT ANALYSIS OF THE AUTOMATED FLOW CONTROL FUNCTION OF THE AIR TRAFFIC CONTROL SYSTEMS COMMAND CENTER. Washington, U.S. Federal Aviation Administration, June 1977. 134 p. DOT-TSC-FAA-77-10. FAA-RD-76-204. (IR 77-0800) 10A

 Benefits estimated through 1990. Only benefit that could be appropriately quantified was fuel savings due to implementation of Fuel Advisory Departure Procedures.
- 244. Yodice, John S. THE AVIATION FUEL ALLOCATION PROGRAM. AOPA Pilot, v. 17(5), May 1974:83-84. 10A

 Explanation of program's application in general aviation and criticism of some aspects of the regulations.
- 245. YOUR GAS MILEAGE: INTERVIEW WITH ERIC O. STORK. EPA Journal (U.S. Environmental Protection Agency), v. 3(8), Sept. 1977: 8. HQ

 How EPA tests cars for fuel economy and what the results mean.

MODAL COMPARISONS

- 246. Aerospace Corporation, El Segundo, Calif. CHARACTERIZATION OF THE U.S. TRANSPORTATION SYSTEM. Washington, U.S. Energy Research and Development Administration, 1977. 6 v. ATR-77(7398) v. I-VI. (HE203.A715) HQ, 10A
 - V. 1. Domestic air transportation (passenger and cargo).
 - V. 2. Highway transportation (autos, trucks, buses, motorcycles, bicycles).
 - V. 3. Pipeline transportation systems (petroleum, natural gas, water).
 - V. 4. Railroads, (freight and passengers).
 - V. 5. Urban rail transit.
 - V. 6. Water transportation of freight.

Statistical data are grouped into categories describing physical state of the mode, modal activity or usage, modal economic factors, energy consumption, and energy intensity characteristics of the mode.

- 247. Boeing Commercial Airplane Co. INTERCITY PASSENGER TRANSPORTATION DATA, V. 1: Service and economic comparisons. Renton, Wash., May 1975. 201 p. Boeing D6-41814,1. (IR 76-0627) 10A
- V. 2: Energy comparisons. Renton, Wash., May 1975. 230 p. Boeing D6-41814,2. (IR 76-0628) 10A

 Two volume series comparing measures of performance of various public and private transportation modes providing domestic intercity passenger travel.
- 249. Gunnarsson, S. Olof and Fil.-kand Bo Persson. A NOTE ON THE ENERGY EFFICIENCY OF VARIOUS MEANS OF TRANSPORT. Traffic Engineering and Control (Great Britain), v. 17(10), Oct. 1976:418-419. HQ

 Investigation into energy efficiency of various means of transport (car, bus, and tramway). Investigation based on statistics from Göteborg, Sweden (population 410,000), 1970-1974.
- 250. Harman, R. G. FUEL IN TRANSPORT. Traffic Engineering and Control (Great Britain), v. 15 (10-11), Feb.-Mar. 1974: 477-479. HQ Quantity and type of fuel used are basic factors in any transport system.
- 251.

 . FUEL IN TRANSPORT: AN ADDENDUM. Traffic Engineering and Control (Great Britain), v. 15(12-13), Apr.-May 1974: 608. HQ

 Tables and graph giving typical levels of fuel consumption per passenger-mile for various transport modes in peak and average load conditions in urban networks.
- 252. HOW DO THE AIRLINES RATE? Air Line Pilot, v. 43(7), July 1974: 23. 10A Comparative fuel efficiency of airplane, auto, bus, and train.

- 253. International Road Transport Union. THE ENERGY CRISIS AND THE ROAD HAULAGE INDUSTRY'S RATES OF FUEL CONSUMPTION: COMPARISON BETWEEN RAIL AND ROAD. Geneva, 1974. 32 p. (TEA525.178) HQ
- 254. Mitre Corporation. A PERSPECTIVE OF TRANSPORTATION FUEL ECONOMY. McLean, Va., Apr. 1974. 15 p. MTP-396. (IR 75-0391) 10A Modal comparisons in energy usage.
- 255. National Research Council, Transportation Research Board. ENERGY EFFECTS, EFFICIENCIES, AND PROSPECTS FOR VARIOUS MODES OF TRANSPORTATION. Washington, 1977. 57 p. (TE5091.N283 no. 43) HQ, 10A

 Research sponsored by the American Association of State Highway and Transportation Officials in cooperation with the Federal Highway Administration.
- 256. Oak Ridge National Laboratory. ENERGY INTENSIVENESS OF PASSENGER AND FREIGHT TRANSPORT MODES 1950-1970. Oak Ridge, Tenn., Apr. 1973. 44 p. ORNL-NSF-EP-44. (IR 76-0728) 10A

 Highlights important shifts in transportation energy use patterns during period examined.
- 257. Peat, Marwick, Mitchell & Co., Washington. ENERGY AND ECONOMIC IMPACTS OF PROJECTED FREIGHT TRANSPORTATION IMPROVEMENTS. Washington, U.S. Dept. of Transportation, May 1977. 448 p. DOT-TSC-OST-76-61. (HE18.5.A35 no. DOT-TSC-OST-76-61) HQ

 Examines current and future energy impacts for each major freight mode, by commodity and, in many cases, by vehicle type.
- 258. Rand Corporation. THE EFFECT OF FUEL PRICE INCREASES ON ENERGY INTENSIVENESS OF FREIGHT TRANSPORT. Prepared under a grant from the National Science Foundation. Santa Monica, Calif., Dec. 1971. 46 p. R-804-NSF. (IR 74-0002) 10A

 Fuel price increases generally affect each transport mode in proportion to its energy intensiveness. Competitive position of modes would be altered and modal redistribution might result.
- ENERGY IN THE TRANSPORTATION SECTOR.

 Santa Monica, Calif., Mar. 1973. 9 p. (IR 74-0001) 10A

 Comparison of modal efficiencies. Text of talk given at
 Florida Governors Conference on Energy Supply and Use,
 Tallahassee, Fla., Mar. 13-14, 1973, based on work sponsored
 by the National Science Foundation.
- 260. REPORT SEES AUTO TRAVEL DECLINE. Automotive News, v. 53(4670), Oct. 10, 1977: 30. HQ

 Analysis of U.S. transportation market concludes that need to reduce energy use in transportation and changing travel habits should cause decided shift from plane and car to rail and local mass transit by 1995.

- 261. Rose, A. B. ENERGY INTENSITY AND RELATED PARAMETERS OF SELECTED TRANSPORTATION MODES: FREIGHT MOVEMENTS. Prepared for the U.S. Dept. of Energy, Office of Conservation and Solar Applications. Oak Ridge, Tenn., Oak Ridge National Laboratory, 1979. 150 p. ORNL-5554. (TJ163.5.T7R678) HO
- ENERGY INTENSITY AND RELATED PARAMETERS OF SELECTED TRANSPORTATION MODES: PASSENGER MOVEMENTS. Prepared for the U.S. Dept. of Energy, Office of Conservation and Solar Applications. Oak Ridge, Tenn., Oak Ridge National Laboratory, 1979. 175 p. ORNL-5506. (TJ163.5.T7R68) HQ
- 263. Sheahan, Richard Thomas. TECHNOLOGY—ENERGY PROFILE: AUTO VS. TRANSIT.

 Mass Transit, v. 3(10), Nov. 1976: 29-30. HQ

 Comparison of energy—intensiveness of urban bus and train versus automobile offers data for establishing national energy policy.
- 264. Tuininga, E. J., and others. THE ENERGY CONSUMPTION OF MEANS OF TRANSPORT, A COMPARATIVE SURVEY. The Hague, The Netherlands, Institute voor Wegtransportmiddelen TNO, 1974. 121 p. (HD9540.5.T85) HQ Considers currently used transport and, briefly, some new and future systems.
- 265. U.S. National Aeronautics and Space Administration, Ames Research Center, Moffett Field, Calif. and U.S. Department of Transportation. TRANSPORTATION VEHICLE ENERGY INTENSITIES (a joint DOT/NASA reference paper). Washington, June 1974. 27 p. NASA-TM-X-62404, DOD-TST-13-74-1. (IR 75-0706) 10A N75-13690

 Energy consumption of air and ground, passenger and freight vehicles in current use, about to enter service, and projected into 1980's.
- 266. U.S. Transportation Systems Center, Cambridge, Mass. A SUMMARY OF OPPORTUNITIES TO CONSERVE TRANSPORTATION ENERGY. Washington, U.S. Dept. of Transportation, Aug. 1975. 107 p. DOT-TSC-OST-75-22 Rev. (HE18.5.A35 no. DOT-TSC-OST-75-22 Rev.) HQ PB-247 790

 Describes energy flows associated with transportation, characterizes modal energy efficiencies, and projects potential energy savings to 1980 and 1990.

MODES: AIR GENERAL

- 267. Archibald, Robert B. and William S. Reece. THE IMPACT OF THE ENERGY CRISIS ON THE DEMAND FOR FUEL EFFICIENCY: THE CASE OF GENERAL AVIATION. Transportation Research, v. 11(3), June 1977: 161-165. HQ, 10A Develops theoretical rationale for hypothesis that the energy crisis has induced an increase in the demand for fuel efficiency as a characteristic of aircraft and empirically tests this hypothesis with data from the U.S. general aviation market.
- 268. ENERGY AND AEROSPACE. Proceedings of an Anglo/American conference organized by the Royal Aeronautical Society and the American Institute of Aeronautics and Astronautics, London, Dec. 5-7, 1978. London, The Royal Aeronautical Society, 1978. 520 p. (TL704.7.E73) 10A
- THE ENERGY CRISIS AND GENERAL AVIATION: WHAT YOU SHOULD KNOW ABOUT THE ENERGY CRISIS AS A PRIVATE AVIATOR. A supplement to "Inside Private Aviation." New York, H.&.C. Publishing Company, Inc., 1974. 12 p. (TL544.G281) 10A

 Although general aviation uses about one tenth of one percent of all gasoline produced in the United States, it was singled out for 20-50% cutback. Gives tips on saving gas, asks private pilots to pressure their Congressmen.
- 270. THE ENERGY DILEMMA AND ITS IMPACT ON AIR TRANSPORTATION.
 Calvin R. Dyer, and others, eds. Hampton, Va., U.S. National
 Aeronautics and Space Administration, Langley Research Center, 1973.
 173 p. (TL533.E73 1973) 10A
 Twenty investigators from ten different academic disciplines
 were involved in Summer Faculty Program in Engineering Systems
 Design, sponsored jointly by NASA and the American Society for
 Engineering Education.
- 271. Escher Technology Associates. PROSPECTS FOR LIQUID HYDROGEN FUELED COMMERCIAL AIRCRAFT. St. Johns, Mich., Sept. 1973. 33 p. ETA-PR-37. (IR 74-0304) 10A

 The hydrogen fueled commercial aircraft seen as attractive prospective development, favorably affecting future energy and environmental situations. There should be a strong economic incentive to carry out its development.
- 272. Finger, Harold B. THE ROLE OF AEROSPACE ORGANIZATIONS IN ENERGY DEVELOPMENT, OR, CAN AEROSPACE SUCCESS BRING SUCCESS IN ENERGY.

 In: American Institute of Aeronautics and Astronautics/Edison Electric Institute/Institute of Electrical and Electronics Engineers Conference on New Options in Energy Technology, San Francisco, Calif., Aug. 2, 1977. 5 p. AIAA Paper 77-1001 (TJ163.3.A53, 1977, v.2) 10A

- 273. Oak Ridge National Laboratory. TOTAL ENERGY USE FOR COMMERCIAL AVIATION IN THE U.S. Oak Ridge, Tenn., Apr. 1974. 15 p. ORNL-NSF-DP-68. (IR 76-0882) 10A

 Calculates both direct and indirect energy use and evaluates certain airline conservation measures to conclude that direct fuel savings can be increased by 20%.
- 274. Royal Aeronautical Society. A REVIEW OF PRECIOUS RESOURCES AND THEIR EFFECT ON AIR TRANSPORT. Proceedings, 1974 spring convention, May 15-16, 1974. London, 1974. 355 p. (TL505.R72) 10A Seventeen papers.
- 275. Shaw, Robert R. AIR TRANSPORT AND ENERGY: A PROBLEM STILL SEEKING SOLUTION. ICAO Bulletin, v. 30(6), June 1975: 16-17. 10A
- 276. Stanford Research Institute, Arlington, Va. THE ECONOMIC IMPACT OF ENERGY SHORTAGES ON COMMERCIAL AIR TRANSPORTATION AND AVIATION MANUFACTURE. Vol. 2: Aviation industries profiles and energy usage characteristics. Washington, U.S. Federal Energy Administration, June 1975. 282 p. FEA/B-75/589. (IR 76-0364) 10A PB-246 272

Industry profiles and energy usage characteristics for both air transportation industry and aircraft, engines, and parts manufacturers.

- 277. U.S. Congress, House, Committee on Public Works and Transportation, Subcommittee on Aviation. FUEL PROBLEMS AND THEIR IMPACT ON THE AIR TRANSPORTATION INDUSTRY. Committee Print 94-19. 94th Congress, 1st session. Washington, U.S. Govt. Printing Office, 1975. iii, 108 p. (TL534.8.E3A5) 10A
 Briefings before the Subcommittee by representatives of the aviation industry, government agencies concerned with transportation and energy, and the Aviation Consumer Action Project.
- 278. U.S. Federal Aviation Administration, Aviation Forecast Division.
 ENERGY IMPACT ANALYSIS: PROFILES OF SCHEDULED AIR CARRIER OPERATIONS
 AT 25 U.S. AIRPORTS. Washington, Feb. 1974. 57 p. (TL725.3.D4A52
 1974) 10A

 Derived from Official Airline Guide published schedules before

Derived from Official Airline Guide published schedules before and after adjustments were made in response to fuel allocations, Nov. 73 - Jan. 74.

279. Winant, John H. IMPACT OF FUEL AVAILABILITY AND OTHER TRENDS ON GENERAL AVIATION. Flight Operations, v. 68(4), Apr. 1978: 18-19.

Speech by representative of the National Business Aircraft Association as read into the Congressional Record by Rep. Barry Goldwater, Jr.

MODES: AIR CONSERVATION TECHNOLOGY AND TECHNIQUES

- 280. A300 AIRBUS RANKS NO. 1 IN JET FUEL EFFICIENCY. Air Transport World, v. 14(5), May 1977: 43. 10A
 Rating of all jet and turboprop aircraft.
- 281. Aarons, Richard N. RNAV AND THE FUEL CRUNCH. Business and Commercial Aviation, v. 34(2), Feb. 1974: 82. 10A

 Area navigation can increase efficiency of general aviation operations.
- 282. AIRCRAFT TOWING COULD SAVE FUEL. Airport Forum, v. 5(2), Apr. 1975:
 40. 10A
 Substitute for some taxiing operations.
- 283. AIRPORT OPERATIONS ENERGY SAVING RECOMMENDATIONS. Airport World, v. 7(1), Jan. 1974: 14-15. 10A

 As recommended by the Aircraft Owners and Pilots Association (AOPA).
- 284. American Institute of Aeronautics and Astronautics. AIRCRAFT FUEL CONSERVATION: AN AIAA VIEW. Proceedings of a workshop conference, Reston, Virginia, Mar. 13-15, 1974. New York, 1974. 43 p. (TL704.7.A73) 10A

 Review and discussion of technical aspects of aircraft fuel conservation methods; recommendations for initiation of those measures having the best prospects for short-term and long-term impact.
- 285. Boeing Commercial Airplane Co., Seattle, Wash. FUEL CONSERVATION POSSIBILITIES FOR TERMINAL AREA COMPATIBLE AIRCRAFT. Hampton, Va., U.S. National Aeronautics and Space Administration, Langley Research Center, Mar. 1975. 229 p. NASA CR-132608. (IR 76-0984) 10A N75-19224

 Fuel-saving potential of research and technology programs in areas of composite primary structure, airfoil/wing design, and stability augmentation systems.
- 286. BOEING, LEAR SIEGLER ARE DEVELOPING NEW FUEL EFFICIENCY SYSTEM.
 Air Transport World, v. 14(3), Mar. 1977: 42-43. 10A
 Airborne Performance Photo Computer System (APPCS).
- 287. BOEING, LOCKHEED DISPUTE FUEL EFFICIENCY STUDY. Air Transport World, v. 14(8), Aug. 1977: 33-35. 10A

 Contend their wide-bodied aircraft are more fuel efficient than the A300.
- 288. Boeing Vertol Co., Philadelphia, Pa. IDENTIFYING AND ANALYZING METHODS FOR REDUCING THE ENERGY CONSUMPTION OF HELICOPTERS. Hampton, Va., U.S. National Aeronautics and Space Administration, Langley Research Center, Nov. 1975. 267 p. NASA CR-144953. (IR 77-0528) 10A N76-23250 Identifies technology areas which would result in largest energy (or fuel) savings when applied to large tandem (100 passenger) civil helicopters in 1985 time frame.

- 289. FUEL CRISIS RESHAPES ECONOMICS OF STAND-BY ROCKET POWER. Air Transport World, v. 11(1), Jan. 1974: 45-46. 10A
 Rather than switch to higher powered engines, use of rocket power might save fuel.
- 290. Garrison, Paul. SPEED VS. ECONOMY. Flight Operations, v. 68(10), Oct. 1978: 15-17. 10A

 How to strike a balance between minimum flight time, maximum flight time, and maximum fuel economy.
- 291. General Electric Co., Cincinnati, Ohio. STUDY OF TURBOFAN ENGINES DESIGNED FOR LOW ENERGY CONSUMPTION. Washington, U.S. National Aeronautics and Space Administration, Aug. 1976. 134 p. NASA CR-135053. (IR 77-0965) 10A N76-30218

 Evaluates features of CF6 family of current engines and analyzes specific design of advanced technology turbofan for 1985 and beyond.
- 292. Gray, D. E. HIGH EFFICIENCY ENGINE CYCLES FOR AIR TRANSPORT FUEL ECONOMY. In: North Atlantic Treaty Organization, Advisory Group for Aerospace Research and Development. Variable Geometry and Multicycle Engines. Mar. 1977. p. 14-1 14-11. AGARD CP-205.

 (IR 78-0521) 10A AD-A040 189

 Assessment of effects of technological progress and operating characteristics of two selected propulsion systems.
- 293. INSTRUMENTATION FOR FUEL ECONOMY. Business and Commercial Aviation, v. 40(6), June 1977: 83-85. 10A
 Simple electronic fuel-flow counters assist piston-aircraft pilots.
- 294. Lewis, John Hiram III. PROPULSIVE EFFICIENCY FROM AN ENERGY UTILIZATION STANDPOINT. Journal of Aircraft, v. 13(4), Apr. 1976: 299-302. 10A
- 295. Lockheed Aircraft Corporation, Burbank, Calif. EVALUATION OF ADVANCED LIFT CONCEPTS AND FUEL CONSERVATIVE SHORT-HAUL AIRCRAFT. V. I. Moffett Field, Calif., U.S. National Aeronautics and Space Administration, Ames Research Center, June 1974. 310 p. NASA CR-137525. (IR 76-0245) 10A N75-20291 Covers introductory material, evaluation of requirements and over-the-wing/internally blown flap vehicles.
- . V. II.

 Moffett Field, Calif., U.S. National Aeronautics and Space Administration,
 Ames Research Center, June 1974. 365 p. NASA CR-137526. (IR 76-0246)

 10A N75-20292

 Covers augmentor wing and mechanical flap vehicles, other lift
 concepts, evaluation of aircraft configurations.

297.

Summary. Washington, U.S. National Aeronautics and Space Administration, Feb. 1975. 78 p. NASA CR-2502. (IR 75-0550) 10A N75-16557

Two phase study:

- investigation of critical design aspects of the over-thewing/internally blown flap hybrid, augmentor wing, and mechanical flap aircraft for 3000' field length, with parametric extension to other field lengths.
- evaluation of fuel savings achievable by application of advanced lift concepts to short-haul aircraft and determination of effect of different field lengths, cruise requirements, and noise levels on fuel consumption and airplane economics at higher fuel prices.
- 298. Lockheed-California Company, Burbank, Calif. ADVANCED SUPERSONIC TECHNOLOGY CONCEPT STUDY; HYDROGEN FUELED CONFIGURATION. Moffett Field, Calif., U.S. National Aeronautics and Space Administration, Ames Research Center, Jan. 1974. 320 p. NASA CR-114718. (IR 78-0566) 10A N75-10943

Energy expenditure per passenger mile is significantly lower than for a Jet A-1 fueled aircraft of comparable design, and aircraft is less costly to develop and operate.

- Summary. Moffett Field, Calif., U.S. National Aeronautics and Space Administration, Ames Research Center, Apr. 1975. 52 p. NASA CR-2534. (IR 76-0989) 10A N75-21268

 Comparison of hyrogen-fueled and Jet A-1 fueled supersonic transports to determine economic and performance potential of liquid hydrogen as an alternate fuel.
- 300. McNamara, John E. THE FUEL CRISIS AND THE CONTROLLER. Journal of Air Traffic Control, v. 16(1), Jan.-Feb. 1974: 5-9. 10A
 Provides guidelines to evaluate turbojet descent profiles.
- 301. MAKING FUEL GO FURTHER. Flight International, v. 111(3542), Jan. 29, 1977: 244-247. 10A

 Short, medium, and long-term means of making fuel go further.
- 302. Mitre Corporation, McLean, Va. ATC ACCOMMODATION OF FUEL-CONSERVATIVE TURBOJET OPERATIONS. Washington, U.S. Federal Aviation Administration, May 1978. 157 p. FAA-EM-78-14. (IR 78-1018) 10A AD-A059 050 Compares estimated fuel savings potential of five proposals which, if adopted, would require significant changes to the Federal Air Regulations.
- . AN ANALYSIS OF FUEL CONSERVATION

 THROUGH AIRCRAFT TOWING. Prepared for the Office of Systems Engineering
 Management, U.S. Federal Aviation Administration. Feb. 1975. 40 p.

 MTR-6790. (IR 77-0035) 10A

Analyzes towing at top 20 U.S. air carrier airports. Concludes no towing scheme economically feasible unless fuel prices increase 150-200% with no increase in crew costs.

- 304. Mohleji, S. C. FUEL CONSERVATION FOR HIGH PERFORMANCE AIRCRAFT IN THE TERMINAL AREA. Navigation: Journal of the Institute of Navigation, v. 25(1), Spring 1978: 19-27. 10A
- 305. Moss, Frank E. HATCHING A LEANER PTEROSAUR. Air Line Pilot, v. 45(2), Feb. 1976: 7-10. 10A

 Aviation R&D efforts to modify aircraft design to save fuel.
- 306. National Air Transportation Association, Inc. ENERGY CONSERVATION FOR GENERAL AVIATION OPERATIONS: AN INFORMATION HANDBOOK FOR AVIATION SERVICES AND SUPPORT BUSINESSES. Washington, 1977. 32 p. (TL 704.7.N38) 10A

Guidelines for energy saving measures for buildings and equipment, aircraft in flight.

307. Oak Ridge National Laboratory. AIRPLANE ENERGY USE AND CONSERVATION STRATEGIES. Oak Ridge, Tenn., May 1974. 45 p. ORNL-NSF-EP-69. (IR 78-0630) 10A

Develops fuel use model using eight of the most popular airplanes. Results show short flights are very fuel inefficient. Fuel efficiency can be increased in the short term by operational changes. Increased load factor offers the greatest potential for reducing airplane energy intensiveness.

308. Pratt and Whitney Aircraft, East Hartford, Conn. STUDY OF TURBOFAN ENGINES DESIGNED FOR LOW ENERGY CONSUMPTION. Washington, U.S. National Aeronautics and Space Administration, Apr. 1976. 120 p. NASA CR-135002. (IR 77-0966) 10A N76-22197

Identifies near-term technology improvements which can reduce fuel consumed in JT9D, JT8D and JT3D turbofans in commercial fleet operation through the 1980's, and new technology for future.

. STUDY OF UNCONVENTIONAL AIRCRAFT ENGINES DESIGNED FOR LOW ENERGY CONSUMPTION. Washington, U.S. National Aeronautics and Space Administration, June 1976. 147 p. NASA CR-135065. (IR 77-0986) 10A N76-29233

Identifies and evaluates most promising unconventional aircraft engines based on fuel savings and improved economics, and for both long-range and medium-range aircraft.

- 310. Randell, M. A. L. FUEL ECONOMY WITH LINEAR HOLDING. The Controller, v. 14(3), Aug. 1975:41-42. 10A

 Includes table of selected aircraft and fuel saved by reducing speeds while holding.
- 311. U.S. Federal Aviation Administration. A FUEL/ENERGY CONSERVATION GUIDE FOR AIRPORT OPERATORS. Washington, Feb. 19, 1974. 5 p. Advisory Circular 150/5240-7. 10A

Identifies potential areas where fuel and energy usage can be conserved to assist airport operators in reducing fuel and energy consumption.

- 312. ENERGY CONSERVATION POTENTIAL OF GENERAL AVIATION ACTIVITY. Washington, 1979. iii, 43 p. FAA-EE-79-20. (TL671.U53) 10A
- . A PROPOSED AVIATION ENERGY

 CONSERVATION PROGRAM FOR THE NATIONAL AVIATION SYSTEM. V. I: The short run, 1977-1978. Washington, Nov. 1978. 83 p. FAA-AVP-78-12. (IR 79-0020) 10A

Alternatives that could be pursued by the Federal Government as well as options that could be adopted by various segments of the aviation industry.

- 314. V. II. The intermediate and long run, 1979-1990. 90 p. (IR 79-0021)
- V. III. The proposed aviation energy conservation program. 90 p. (IR 79-0022) 10A
- 316. V. IV. Summary report. 34 p. (IR 79-0023) 10A
- 317. Western Michigan University, Transportation Technology Department. PROCEEDINGS; A NATIONAL CONFERENCE ON ENERGY CONSERVATION IN GENERAL AVIATION. Oct. 10-11, 1977. Kalamazoo, Mich. 149 p. (IR 78-0804) 10A

Nineteen papers on impact of energy conservation, technology, present and future, and operational practices; stresses importance of general aviation to overall transportation picture.

318. Wilkinson, Kenneth. FUEL ECONOMY - THE NEXT STAGE. Flight International, v. 109(3490), Jan. 31, 1976: 227-236. 10A
Outlook for greater fuel efficiency in conventional and SST aircraft.

MODES: RAIL

- 319. Aerospace Corporation. ENERGY SAVINGS RESULTING FROM MODAL SHIFTS TO CORRIDORRAIL. Project performed under contract to the U.S. Federal Railroad Administration. El Segundo, Calif., July 1975. 56 p. (TJ163.3.S66) HQ

 Study of Northeast Corridor indicates high energy efficiency of rail systems relative to other modes of transport, except possibly bus. Potential for energy savings can be significant factor in decision to provide improved rail service.
- 320. Buffington, Jesse L. POLLUTION AND ENERGY CONSUMPTION OF RAILROAD TRANSPORTATION. College Station, Texas A&M University, Texas Transportation Institute, Jan. 1977. iii, 26 l. (HE2771.T4B852) HQ Texas Rail System evaluation. Includes intermodal comparisons for ground transport.
- 321. Clark, Ron. ENERGY CRISIS; BOOST TO PIGGYBACK? Container News, v. 14(8), Aug. 1979: 12-14, ff. HQ
 Railroad officials say that trains carrying 38 percent of nation's freight use only 9 percent of total energy devoted to distribution.
- 322. Creswick, F. A. ENERGY REQUIREMENTS FOR THE MOVEMENT OF INTERCITY FREIGHT. A report to the Association of American Railroads. Columbus, Ohio, Battelle Laboratories, Dec. 1972. 5 p. (TF580.C84) HQ

 Energy-requirement values derived on basis of tractive-power and energy-efficiency estimates, expressed in terms of ton-miles per gallon.
- 323. Fishwick, John P. ENERGY AND TRANSPORTATION BOTH NEED A NEW LOOK. Progressive Railroading, v. 17(1), Jan. 1974: 35-37. HQ

 Energy problem will persist for at least a decade; two great untapped resources are in coal and in rail transportation.
- 324. Hopkins, John B. RAILROADS AND THE ENVIRONMENT: ESTIMATION OF FUEL CONSUMPTION IN RAIL TRANSPORTATION: FINAL REPORT. Washington, U.S. Federal Railroad Administration, 1975-78. 3 v. (TF23.U68A34 no. FRA-ORD-75-74 I-III) HQ
 - V. 1. Analytical model.
 - V. 2. Freight service measurements.
 - V. 3. Comparison of computer simulations with field measurements.
- 325. Ichniowski, Tom. WHAT CARTER'S ENERGY PLAN WILL MEAN TO THE RAILROADS. Railway Age, v. 178(9), May 9, 1977: 16-19. HQ

 With its emphasis on greater use of coal, President's plan could result in 3% annual increase in total rail tonnage and 8% annual jump in rail coal traffic by 1985.
- 326. Myers, Edward T. RAILROADS IN TRANSITION: UNDERSTANDING THE ASSET. Modern Railroads, v. 34(2), February 1979: 37-41. HQ
 Railroads may play larger role as they preserve environment and use energy efficiently.

- 327. Norton, Hugh S. THE ENERGY CRISIS AND INTERCITY PASSENGER TRANSPORTATION. High Speed Ground Transportation Journal, v. 9(2), Summer 1975: 51-58. HQ

 Intercity passenger transportation, 1935-1970; its future; the railroad as a competitor in the passenger field.
- 328. RAIL TRANSIT KNOCKED ON ENERGY USE. Engineering News-Record, v. 199(14), Oct. 6, 1977: 41. HQ, 10A

 Congressional Budget Office report says: "In terms of operating energy per passenger-mile, rail ranks among the most energy-efficient of all modes. But when construction and station energy are taken into consideration, rapid rail ranks among the least energy-efficient of the conventional urban public transportation modes." See also Item 334.
- 329. RAILROADS AND THE ENERGY CRISIS. Railway Age, v. 180(15), Aug. 13, 1979: 15-19, ff. HQ
 Diesel fuel; electrification; America rediscovers the passenger train.
- 330. Reistrup, P. H. RAIL PASSENGER SERVICE IN AN ENERGY DEFICIENT WORLD. Editorial. Rail International (Belgium), v. 8(7-8), July-Aug. 1977: 349-356. HQ
- 331. REPORT OF JOINT CONFERENCE ENO FOUNDATION BOARD OF DIRECTORS AND BOARD OF CONSULTANTS, OCTOBER 22 AND 23, 1975. Pt. 1. Restructuring the railroads of the United States. Pt. 2. Energy efficiency of various transportation systems. Traffic Quarterly, v. 30(2), Apr. 1976: 167-239. HQ, 10A
- 332. THE ROLE OF THE U.S. RAILROADS IN MEETING THE NATION'S ENERGY REQUIRE-MENTS. A conference sponsored by the U.S. Federal Railroad Administration and the Wisconsin Dept. of Transportation, May 6-8, 1974. Madison, University of Wisconsin, Graduate School of Business, 1974. 84 p. (HE2717.R66) HQ
- 333. Talukdar, Sarosh N. ENERGY MANAGEMENT FOR ELECTRIC POWERED TRANSPORTATION SYSTEMS. Pittsburgh, Transportation Research Institute, 1977. viii, 196 p. (TA1235.T28) HQ

 Prepared by the Institute and the Carnegie-Mellon University Power Engineering Program for the U.S. Dept. of Transportation.
- 334. TRANSIT REBUTTAL. Engineering News-Record, v. 199(15), Oct. 13, 1977: 17. HQ, 10A

 Rail transit officials attack as inaccurate diatribe a Congressional Budget Office report that heavy-rail transit is one of least energy-efficient modes of public transportation, if construction and station maintenance energy costs are included. See also Item 328.

- 335. U.S. Federal Railroad Administration. FUEL EFFICIENCY IMPROVEMENT IN RAIL FREIGHT TRANSPORTATION: MULTIPLE UNIT THROTTLE CONTROL TO CONSERVE FUEL. Washington, 1976. vi, 25 p. FRA/ORD-76-297. (TF23.U68A34 no. FRA-ORD-76-297) HQ PB-262 470

 Results of tests on the Kansas City Southern confirm device as effective.
- Washington, Feb. 1978. 58 p. FRA/ORD-78-13. (TF23.U68A34 no. FRA-ORD-78-13) HQ PB-279 457

 Attempts to quantify actual fuel savings that can result from improved locomotive control devices, maintenance practices, and operating efficiencies.
- 337. Union College, Mechanical Engineering Department, Schenectady, N.Y. ENERGY INTENSITY OF INTERCITY PASSENGER RAIL. Washington, U.S. Dept. of Transportation, Office of University Research, Dec. 1977. 296 p. DOT/RSPD/DPB/50-78/7. (HE2566.M58) HQ
 Present high energy intensity figures attributed to low load factor, but potential exists for improving values.
- 338. Walbridge, Edward W. ENERGY CONSUMPTION, POLLUTANT PRODUCTION, AND DOLLAR COSTS OF DIESEL SUBURBAN COMMUTER TRAINS. Transportation (Netherlands), v. 5(3), Sept. 1976: 285-307. HQ

 Per passenger-mile energy consumption for one mass transit mode, suburban diesel commuter rail service. Results based on data from Chicago's three largest commuter railroads.

MODES: ROAD

GENERAL

339. Brown, Lester R., and others. THE FUTURE OF THE AUTOMOBILE IN AN OIL-SHORT WORLD. Futurist, v. 13(6), Dec. 1979: 447-453, ff. HQ, 10A

As oil supplies dwindle, the personal automobile will have to absorb the brunt of future energy shortages. Unless major changes are made in its role and design, people will be forced to turn to public transport, two-wheeled vehicles, and feet.

- . RUNNING ON EMPTY: THE FUTURE OF THE AUTOMOBILE IN AN OIL-SHORT WORLD. New York, W. W. Norton, 1979. ix, 116 p. (TL145.B852) HQ
- 341. Callahan, Joseph M. TECHNICAL ACHIEVEMENTS '78 CARS. Automotive Industries, v. 157(6), Oct. 1, 1977: 22-28, ff. HQ
 U.S. auto makers take a giant step toward converting their products into a much more fuel efficient fleet.
- 342. Charles River Associates, Cambridge, Mass. THE CONSUMER BEHAVIOR TOWARDS FUEL EFFICIENT VEHICLES. Executive summary. Washington, U.S. National Highway Traffic Safety Administration, 1978. iii, 22 p. DOT HS-804 775. (TL151.6.C532) HQ
- Washington, U.S. National Highway Traffic Safety Administration, 1978.
 x, 190 p. DOT HS-804 776. (TL151.6.C53) HQ
- 344. Coan, Howard. YOUR CAR'S MPG WILL GROW IN THE 1980s. Transportation Engineering, v. 47(12), Dec. 1977: 30-32. HQ, 10A

 Manufacturers make changes to meet federal emission and fuel economy standards.
- 345. Environmental Impact Center, Newton, Mass. UNCERTAINTIES IN ESTIMATES OF FLEET AVERAGE FUEL ECONOMY: A STATISTICAL EVALUATION. Washington, U.S. Dept. of Transportation, June 1977. 66 p. DOT-TSC-OST-77-32. (HE18.5.A35 no. DOT-TSC-OST-77-32) HQ

 Attempt at assessment of current Federal procedure for estimating fuel economy of manufacturers' new car fleets.
- 346. French, Alexander and Lyle D. Wylie. HIGHWAY TRANSPORT AND ENERGY PROBLEMS IN EUROPE. Washington, U.S. Federal Highway Administration, 1975. i, 53 p. (TEA250.F84) HQ

 Fuel conservation, financing, highway safety, and related planning and research efforts in Belgium, France, Federal Republic of Germany, Sweden, and the U.K.

347. HIGHWAY VEHICLE SYSTEMS CONTRACTORS COORDINATION MEETING, 13th. Oct. 4-6, 1977, Dearborn, Michigan. Washington, U.S. Dept. of Energy, 1978. viii, 407, 18.CONF-771037. UC-96. (TL151.6.H54) HO

In order to promote maximum rate of technical progress toward country's energy conservation goals, contractors, staff consultants, prospective contractors, and selected guests meet annually to discuss requirements, and current and future programs.

- 348. Hirst, Eric. DIRECT AND INDIRECT ENERGY REQUIREMENTS FOR AUTOMOBILES. Supported by the National Science Foundation RANN Program. Oak Ridge, Tenn., Oak Ridge National Laboratory, 1974. v, 38 p. ORNL-NSF-EP-64. (TL151.6.H58) HO
- 349. Hoheisel, Robert. THE ENERGY PROBLEM AND SURFACE TRANSPORTATION.
 Highway and Urban Mass Transportation, June 1977: 19-23. HQ
 Remedies for transportation energy problem, long- and short-term.
- 350. Kearney, A. T. INDUSTRIAL ENERGY STUDY OF THE MOTOR VEHICLES INDUSTRY. Sponsored by the U.S. Federal Energy Administration. Chicago, A. T. Kearney, Inc., 1974. 476 p. FEA-EI-1671. (TL240.K32) HQ PB-236 694
- 351. 1980 MOTOR GASOLINE SUPPLY AND DEMAND. Washington, U.S. Dept. of Energy, Energy Information Administration, 1978. 39 p. DCE/EIA-0102/32. (HD9579.G4N54)
- 352. Little (Arthur D.) Inc., Cambridge, Mass. STUDY OF AUTOMOBILE MARKET DYNAMICS. Washington, U.S. Dept. of Transportation, Aug. 1977. 2 v. DOT-TSC-OST-77-1, I-II. (HE18.5.A35 no. DOT-TSC-OST-77-1) HQ PB-272 924: PB-272 925
 - V. 1. Description.
 - V. 2. Analysis.

Develops alternative scenarios to reduce amount of gasoline used and determines effects of these alternatives on the national economy, specifically the sale of new cars.

- 353. Pole, Nicholas. OIL AND THE FUTURE OF PERSONAL MOBILITY. Cambridge, Eng., Eco-Publications, 1973. 64 p. (HD9502.G72P66) HQ
 Examines future of the automobile and suggests ways in which cars and passenger transport in general can be adapted to both immediate and long-term conservation needs.
- 354. Rand Corporation. HOW TO SAVE GASOLINE: PUBLIC POLICY ALTERNATIVES FOR THE AUTOMOBILE. Prepared for the National Science Foundation. Santa Monica, Calif., 1974. xxvii, 168 p. (Q180.U5R25 no. R-1560-NSF) HQ

Focuses on measures that improve average auto fuel economy and reduce auto vehicle-miles-traveled through changes in the cost of driving.

355. Shinnar, Reuel. THE EFFECT OF THE ENERGY CRISIS ON THE PRIVATE CAR IN THE U.S. Transportation Research, v. 9(2-3), July 1975: 87-95.

Possible savings in gasoline by better design are such that growth of 50-80 percent in total miles is allowable without increase in total gasoline consumption, while maintaining safe convenient cars. Options are summarized and compromises between high efficiency and low pollution are discussed.

- 356. Suetsugu, Katsuhiko. THE AUTO AND THE ENERGY CRISIS. Wheel Extended (Japan), v. 3(1), Summer 1973: 22-27. HQ

 Energy consumption patterns in selected countries; transportation energy/efficiency by mode in the United States; U.S. energy requirements by sector; idealized projections of petroleum; effect of ignition timing change; Japan's requirements for petroleum products; U.S. petroleum demand/supply figures; pressure on petroleum reserves from automotive transportation; energy requirements for meeting environmental protection standards.
- 357. U.S. National Highway Traffic Safety Administration. FINAL IMPACT ASSESSMENT OF THE LIGHT TRUCK AND VAN FUEL ECONOMY STANDARDS FOR MODEL YEARS 1980 and 1981. Washington, Mar. 1978. 188 p. in various pagings. (TL230.U65) HQ

 Describes proposed standards; assesses impact on individual manufacturers and consumers, on employment and the national economy; discusses alternative courses of action.
- 358. U.S. Transportation Systems Center, Cambridge, Mass. AUTOMOBILE DRIVELINES. Washington, U.S. Dept, of Transportation, May 1977.
 56 p. DOT-TSC-OST-77-34. (HE18.5.A35 no. DOT-TSC-OST-77-34) HQ
 Assesses automobile driveline components and configurations, quantifying their performance in context of fuel economy, exhaust emission reduction, safety, driveability, production costs and lead times, and engine life.
- 359.

 ECONOMY IMPROVEMENT PROGRAM. Washington, U.S. Dept. of Transportation, Apr. 1976. vi, 18 p. DOT-TSC-OST-76-18. (HE18.5.A35 no. DOT-TSC-OST-76-18) HQ

Covers domestic manufacturers' progress, reviews their future plans in general and assesses likelihood of goals being met.

MODES: ROAD CONSERVATION TECHNOLOGY AND TECHNIQUES

- 360. AERODYNAMIC DESIGN BOOSTS FUEL ECONOMY AND ROOMINESS. Automotive Engineering, v. 87(6), June 1979: 35-41. HQ

 Aerodynamic drag improvements to be second in importance only to reduced weight.
- 361. Aerospace Corporation, El Segundo, Calif. SURVEY OF DRIVER DEVICES FOR IMPROVED FUEL ECONOMY. Washington, U.S. Dept. of Transportation, Nov. 1976. 164 p. DOT-TSC-OST-76-45. (HE18.5.A35 no. DOT-TSC-OST-76-45) HQ PB-264 162

 Features, operating principles, side effects where possible.
- 362. Automobile Club of Southern California, Los Angeles, Calif.
 FIELD EVALUATION OF MILES-PER-GALLON METERS. Washington, U.S. Dept. of
 Transportation, Nov. 1977. 40 p. DOT-TSC-OST-77-64. (HE18.5.A35
 no. DOT-TSC-OST-77-64) HQ
 Test with 140 fleet cars determines no significant influence of
 miles-per-gallon meters on fuel economy.
- 363. Buckley, Frank T., and others. FUEL SAVINGS FROM TRUCK AERODYNAMIC DRAG REDUCERS AND CORRELATION WITH WIND-TUNNEL DATA. Journal of Energy, v. 2(6), Nov.-Dec. 1978: 321-329. HQ
 Fuel savings tests results.
- 364. Cambridge Systematics, Cambridge, Mass. FEASIBILITY STUDY OF SHARED RIDE AUTO TRANSIT. Washington, U.S. Urban Mass Transportation Administration, Sept. 1977. 248 p. UMTA-IT-06-0144-77-1. (TEA450.K62) HQ

 Envisions registered commuters using their own vehicles to carry riders to points along driver's route. Examines operational, legal, institutional, and behavioral consider-
- 365. Campbell, Edward A. RETURN OF THE ELECTRIC MOTOR VEHICLE. Traffic Quarterly, v. 33(1), Jan. 1979:29-43. HQ, 10A
 History, recent developments, Dept. of Energy program.

ations.

- 366. Charles River Associates. POTENTIAL FUEL CONSERVATION MEASURES BY MOTOR CARRIERS IN THE INTERCITY FREIGHT MARKET. Prepared for the U.S. Federal Energy Administration, Office of National Programs. Cambridge, Mass., 1977. 2 v. CRA report nr. 280. (TJ163.5.T7C53) HQ PB-271 816
- 367. Claffey, Paul J. PASSENGER CAR FUEL CONSERVATION. Washington, U.S. Federal Highway Administration, 1977. vi, 235 p. (TL151.6.C63) HQ PB-265 369

- 368. Eccleston, B. H. AMBIENT TEMPERATURE, FUEL ECONOMY, EMISSIONS, AND TRIP LENGTH. Prepared by the U.S. Department of Energy, Bartlesville Energy Research Center. Washington, U.S. National Highway Traffic Safety Administration, 1979. xiv, 110 p. DOT-TSC-NHTSA-79-43. (HE18.5.A34 no. DOT-TSC-NHTSA-79-43) HO
- 369. Erlbaum, Nathan S., and others. AUTOMOTIVE ENERGY FORECASTS:
 IMPACT OF CARPOOLING, TRIP CHAINING, AND AUTO OWNERSHIP. Albany,
 New York State Dept. of Transportation, Planning Division, 1977.
 41 p. (HE213.N7A32 no. 134) HQ
 Sponsored by the U.S. Dept. of Transportation.
- 370. FUEL ECONOMY VIA SYSTEMS ANALYSIS. Automotive Engineering, v. 87(6), June 1979: 52-57. HQ, 10A

 Economy by design has been watchword during front-wheel-drive X-car development program.
- 371. Grey Advertising, Inc. MARKETING PLAN TO ACCELERATE THE USE OF VANPOOLS. Washington, U.S. Dept. of Energy, Office of Conservation and Solar Applications, 1977. 76 p. (TEA450.G84) HQ
- . VANPOOLING DEMONSTRATION PROJECT: FINAL REPORT.

 Washington, U.S. Dept. of Energy, Assistant Secretary for Conservation and Solar Applications, Transportation Programs Office, May 1978.

 66, 4, 88 p. (TEA450.G85) HO
- 373. Gulf Research and Development Company. PASSENGER CAR FUEL ECONOMY IN SHORT TRIP OPERATION: ALTERNATIVE FUELS UTILIZATION PROGRAM. Washington, U.S. Dept. of Energy, Division of Transportation Energy Conservation, July 1978. 66 p. (TL151.6.G86) HQ
- 374. HSLA: A QUESTION OF STRENGTH. Automotive Industries, v. 157(7), Nov. 1, 1977: 35-37. HQ

 Automakers turn increasingly to high strength low alloy (HSLA) steels to further fuel economy.
- 375. Hackleman, Michael A. ELECTRIC VEHICLES: DESIGN AND BUILD. YOUR OWN. Mariposa, Calif., Earthmind, 1977. 202 p. (TL220.H34) HQ
- 376. HOW TO SAVE GASOLINE: PUBLIC POLICY ALTERNATIVES FOR THE AUTOMOBILE. Cambridge, Mass., Ballinger Publishing Co., 1975. xxii, 324 p. (TEA252.H69) HQ

 Study is part of Rand Corporation's continuing research program in energy conservation measures.
- 377. Little (Arthur D.) Inc., Cambridge, Mass. A STUDY OF TECHNOLOGICAL IMPROVEMENTS IN AUTOMOBILE FUEL CONSUMPTION. Prepared in cooperation with the U.S. Environmental Protection Agency. Washington, U.S. Dept. of Transportation, Dec. 1974. 4 v. DOT-TSC-OST-74-40. (HE18.5.A35 no. DOT-TSC-OST-74-40) HQ PB-238 693, 4, 5, 6

 Technology reported is that available in time period July 1973 to Jan. 1974, and is directed to standard and compact-size vehicles.

- . A STUDY OF TECHNOLOGICAL IMPROVEMENTS TO OPTIMIZE TRUCK CONFIGURATIONS FOR FUEL ECONOMY. Washington,
 U.S. Dept. of Transportation, Sept. 1975. 168 p. DOT-TSC-OST-75-46.
 (HE18.5.A35 no. DOT-TSC-OST-75-46) HQ PB-246 681
 Technological changes effectuating 40-80% fuel economy could be accomplished in 1980's.
- 379. MASSIVE RESEARCH EFFORT PROPOSED TO REDESIGN FUEL-EFFICIENT CAR.
 World Highways (International Road Federation), v. 30(5), May 1979: 4.
 HQ
 Secretary of Transportation Adams asks production of 40-50

mpg car by year 2000.

380. MICROCOMPUTER CAN CUT CAR PETROL COSTS. New Scientist (Great Britain), v. 77(1088), Feb. 2, 1978: 295. HQ

Instrumented car, to be tested by Transport and Road Research Laboratory, will make use of a dash-board mounted microprocessor to carry out complex calculations regarding fuel consumption while car is in motion.

- 381. OBSOLETE SIGNALS. American City & County, v. 92(10), Oct. 1977: 9. HQ Studies by the Federal Energy Administration and the Federal Highway Administration show that if traffic-activated or computer-controlled signal systems replaced outdated systems, more than a million gallons of gasoline a day could be conserved.
- 382. AN ONRUSH OF MOPEDS: 150 MI. TO THE GAL. Business Week, no. 2488, June 20, 1977:33, ff. HQ, 10A
 Selling for \$295 to \$495, with a chance for a 1 million-unit market, moped sales in the U.S. could double this year as regulations ease a bit.
- 383. Plum, Roger. CARPOOLING: AN OVERVIEW WITH ANNOTATED BIBLIOGRAPHY. Minneapolis, Center for Urban and Regional Affairs, University of Minnesota, 1979. 36 p. (TEA450.P68) HQ
- 384. R&D Planning Workshop, Transportation Systems Center, Cambridge, Mass. TIRE ROLLING LOSSES AND FUEL ECONOMY. Sponsored by the Society of Automotive Engineers Highway Tire Committee, in cooperation with the U.S. Energy Research and Development Administration, the U.S. Dept. of Transportation, industry, and academia. Troy, Mich., Society of Automotive Engineers, 1977. iii, 202 p. SAE-DOT Conference Proceedings P-74. (TL151.6.R18) HQ
- 385. RIDERSHARING SAVES AUTO, ENERGY COSTS. Translog (Journal of Military Transportation Management), v. 10(6), June 1979: 21. HQ
 Chart: annual costs of commuting to work.

- 386. SEMINAR ON AUTOMOBILE FUEL EFFICIENCY. Proceedings, May 11, 1978.

 Marion W. Meader, ed. McLean, Va., Mitre Corporation, 1978. vii,
 119. (TL151.6.S47) HQ

 Examines trade-offs that exist between end-use motor vehicle
 transportation technology, fuel requirements, energy potential
 of the resources providing the fuel, and the environmental,
 health, safety, and economic impacts of the entire motor
 vehicle fuel cycle.
- 387. SHORT-TRIP ENERGY LOSS STUDIED. Automotive Engineering, v. 87(6), June 1979: 78-79. HQ, 10A

 5% improvement in fuel economy during warm-up and short-trip operation might reduce U.S. gasoline consumption by one billion gallons annually.
- 388. Sikorsky, Robert. HOW TO GET MORE MILES PER GALLON: AN INDISPENSABLE GLOVE-COMPARTMENT GUIDE FOR EVERY CAR OWNER IN AMERICA, WITH 282 TIPS TO SAVE YOU GAS AND MONEY. New York, St. Martin's Press, 1978. xvi, 111 p. (TL151.6.S56) HQ
- 389. A SPECIAL TM REPORT: ENERGY CONSERVATION THROUGH PRUDENT EQUIPMENT USE. Traffic Management, v. 13(2), Feb. 1974: 21-24. HQ

 Survey indicates most major firms search for better equipment utilization in transport to save energy and cut costs.
- 390. U.S. Dept. of Transportation, Office of the Assistant Secretary for Systems Development and Technology. AUTOMOTIVE ENERGY EFFICIENCY PROGRAM, STATUS REPORT. A report to the U.S. Congress, House of Representatives, Committee on Appropriations. Washington, 1974. 66 p. (TL151.6.U73)
- 391. U.S. Federal Energy Administration. TRUCKER'S GUIDE TO FUEL SAVINGS. Prepared in cooperation with the U.S. Dept. of Transportation and the U.S. Environmental Protection Agency. Washington, 1976. 20 p. FEA/D-75/412. (TEA534.U52) HQ

 Developed for use with specific engine models.
- 392. U.S. Federal Highway Administration, Office of Highway Planning, Urban Planning Division. ENERGY CONSERVATION IN GROUND TRANSPORTATION: A COMPARISON OF ALTERNATIVE STRATEGIES. Washington, Aug. 1977. 53 p. (TJ163.5.T7U56) HO
- 393. U.S. National Aeronautics and Space Administration, Dryden Flight Research Center, Edwards, Calif. STUDY OF AERODYNAMIC DRAG REDUCTION ON A FULL-SCALE TRACTOR-TRAILER. Washington, U.S. Dept. of Transportation, Apr. 1976. viii, 50 p. DOT-TSC-OST-76-13. (HE18.5.A35 no. DOT-TSC-OST-76-13) HQ PB-254 571. Includes fuel consumption measurements.

- 394. U.S. National Highway Traffic Safety Administration. FIVE YEAR PLAN FOR MOTOR VEHICLE SAFETY AND FUEL ECONOMY RULEMAKING, CALENDAR YEARS 1980-1984. Washington, 1979. 65 p. (TEA323.U65) HQ
- FROM HIGHWAY SAFETY LITERATURE. Washington, Jan. 1977. v, 139 p.
 DOT-HS-802 147. (Z7164.T81U75 SB 11) HQ PB-265 387
 Represents material acquired since establishment of the National Highway Traffic Safety Administration in 1967 as related to fuel economy and the energy crisis in the transportation field.
- , Office of Automotive Fuel Economy.

 AUTOMOTIVE FUEL ECONOMY PROGRAM: ANNUAL REPORT TO THE CONGRESS.

 Washington, 1977. (TEA252.U75) HQ

 Report on implementation of Title V, Improving Automotive

 Efficiency, of the Motor Vehicle Information and Cost Savings

 Act (15 U.S.C. 1901 et seq.), as required by Section 502(a)2

 of the act.
 - 397.

 , Office of Automotive Fuel Economy
 Standards. REPORT ON REQUESTS BY GENERAL MOTORS AND FORD TO REDUCE
 FUEL ECONOMY STANDARDS FOR MY 1981-85 PASSENGER AUTOMOBILES.
 Washington, 1979. 84 p. DOT-HS-804 731. (TL151.6.U654) HQ
 - , Office of Program Analysis.

 PRELIMINARY IMPACT ASSESSMENT OF THE NONPASSENGER AUTOMOBILE FUEL ECONOMY STANDARDS FOR MODEL YEARS 1980 and 1981. Washington, 1977. 140 1. (TL151.6.U65) HQ
 - 399. U.S. Transportation Systems Center, Cambridge, Mass. EFFECT OF VARIATION OF SPEED LIMITS ON INTERCITY BUS FUEL CONSUMPTION, COACH AND DRIVER UTILIZATION, AND CORPORATE PROFITABILITY. Washington, U.S. Dept. of Transportation, Nov. 1975. x, 131 p. DOT-TSC-OST-75-4. (HE18.5.A35 no. DOT-TSC-OST-75-4) HQ PB-247 761
 - GALLON METERS AS A MEANS TO CONSERVE GASOLINE IN AUTOMOBILES.
 Washington, U.S. Dept. of Transportation, Oct. 1976. 78 p.
 DOT-TSC-OST-76-38. (HE18.5.A35 no. DOT-TSC-OST-76-38) HQ
 PB-260 541

In response to a requirement of the Energy Policy and Conservation Act (PL-163) for assessment of fuel flow instruments reading directly in miles per gallon.

U.S. Dept. of Transportation, Jan. 1976. xvi, 95 p. DOT-TSC-OST-75-56. (HE18.5.A35 no. DOT-TSC-OST-75-56) HQ PB-251 479

Reviews divided and open chamber designs, potential improvements in exhaust emissions and fuel economy. Significant programs include those of Ford, Texaco, and Honda.

- 402. Voorhees (Alan M.) and Associates, Inc., McLean, Va. TRANSPORTATION POOLING. Washington, U.S. Dept. of Transportation, Urban Mass Transportation Administration, Jan. 1974. xi, 270 p. UMTA-IT-06-0092-74-1. (TEA450.V695) HQ PB-236 157

 Collection of ten reports summarizing major aspects of carpool programs designed to assist local areas in initiating successful pooling action programs.
- 403. WEIGHT REDUCTION FOR FUEL ECONOMY. Automotive Engineer, v. 4(3), June-July 1979: 39, ff. HQ

 Special supplement covering alternative materials and methods of manufacture.
- 404. Williams, T. and D. Jacklin. METHODS OF EVALUATING THE EFFECT OF AERODYNAMICS ON THE FUEL CONSUMPTION OF COMMERCIAL VEHICLES. Crowthorne, Eng., Transportation and Road Research Library, 1979. 20 p. (TE5094.G7A374 no. 481) HQ

MODES: URBAN MASS TRANSIT

- 405. Barker, William G. and Lawrence C. Cooper. ENERGY CONTINGENCY PLANNING FOR TRANSIT SYSTEMS. Transit Journal, v. 5(3), Summer 1979: 17-24. HQ

 Energy contingency plans, fuel problems, ridership problem.
- 406. Bernard, Martin Joseph. ENVIRONMENTAL ASPECTS OF A LARGE TRANSIT OPERATION. Chicago, Regional Transportation Authority, Planning and Development Dept., Nov. 1975. 22 l. TR-75-01. (HD9502.R35 no. TR-75-01) HQ

 Chicago Transit Authority's facility and vehicle cost, energy consumption, materials input, and emissions into the air.
- 407. Bernard, Martin Joseph and Sarah LaBelle. ENERGY CONSERVATION IN URBAN TRANSIT SYSTEMS. Chicago, Regional Transportation Authority, Planning and Development Dept., Dec. 1975. 17 l. TR-75-06. (HD9502.R35 no. TR-75-06) HQ

 Suggested improvements and their potential energy savings.
- 408. Cooke, Henry R. URBAN PASSENGER TRANSPORTATION SYSTEMS: SOME SELECTION CRITERIA. Urban Forum (Canada), v. 4(4), Jan.-Feb.-Mar. 1979: 4-9, ff. HQ Energy utilization, economics, land use, future.
- 409. Cooper, Lawrence Charles. THE IMPACT OF THE 1973-1974 OIL EMBARGO ON TRANSIT LINE RIDERSHIP: THE CASE OF FORT WORTH, TEXAS. Arlington, Tex., North Central Texas Council of Governments, 1977. 105 p. (HE4487.T4A3 no. 2) HQ

 Identification of a market for mass transportation service in suburban areas, even in a relatively low-density urban area such as Fort Worth, Texas, and especially under economic conditions which restrict fuel availability for private autos.
- 410. Edwards, Jerry L. USE OF A LOWRY-TYPE SPATIAL ALLOCATION MODEL IN AN URBAN TRANSPORTATION ENERGY STUDY. Transportation Research, v. 11(2) Apr. 1977: 117-126. HQ, 10A

 Describes structure of Lowry-type spatial allocation model and results of using the model to evaluate different hypothetical urban forms with respect to level of transportation energy consumed in urban passenger travel.
- 411. ENERGY CONSUMPTION IN RAPID TRANSIT. City and Suburban Travel, Issue 144, Sept. 1973: 4-7, HQ
- 412. Garrison, William L. and David W. Jones, Jr. ENERGY CONSERVATION IN URBAN TRANSPORTATION. Berkeley, University of California Institute of Transportation Studies, 1979. iii, 30 p. UCB-ITS-RR-79-15. (HE193.C36 no. 79-15) HQ

413. General Electric Co., Schenectady, N.Y. A STUDY OF FLYWHEEL ENERGY STORAGE FOR URBAN TRANSIT VEHICLES: PHASE I - FINAL REPORT: PRELIMINARY CONCEPTUAL DESIGN STUDIES. Washington, U.S. Urban Mass Transportation Administration, Sep. 1977. Various pagings. UMTA-NY-06-0062-77-1. (TL223.G27) HQ

Flywheel energy storage is an extremely promising technique for reducing dependence upon petroleum fuels by urban transit buses and offers environmental improvement potentials. Development program should be initiated.

414. Hackney, David. NEEDED: MORE BUSES - FAST. Mass Transit, v. 6(12), Dec. 1979: 8, ff. HQ

As millions of Americans discover energy-saving mass transit, the nation's aging bus fleet needs to replace 26,000 vehicles by 1982.

- 415. Interplan Corporation, Inc., Santa Barbara, Calif. JOINT EPA/UMTA/FEA STRATEGY FOR URBAN TRANSPORTATION AND AIR QUALITY. Washington, U.S. Urban Mass Transportation Administration, Dec. 1974. 4 v. (v. 1 not held). UMTA-RI-06-0005-74-1, 74-2, 77-1. (TEA5000.1789 v. 2-4) HQ PB-261 841, 2, 3
 - v. 2. Public-private urban transportation modal mixes.
 - v. 3. The potential of dual mode.
 - v. 4. Information data base: status.

Objective of study is to formulate the basis of a joint interagency action program which would simultaneously improve urban mobility and air quality, and conserve petroleum resources.

416. Keith, R. A. and R. E. Skinner. PARATRANSIT PROSPECTS - FILLING A GAP. High Speed Ground Transportation Journal, v. 11(3), Fall 1977: 245-259. HO

Urban travel habits in the United States will change in the next decade in response to energy, environmental, and economic problems, and may create a wide gap between what the automobile does well and what conventional public transportation does well. Paratransit (shared riding) can limit the gap and could be serving more passengers than conventional transit in the 1990's.

417. Lawson, L. J. APPLICATION OF KINETIC ENERGY STORAGE TO TRANSPORTATION SYSTEMS. High Speed Ground Transportation Journal, v. 12(3), Fall 1978: 1-27. HO

Rediscovery of flywheel as effective energy storage system leads U.S. Urban Mass Transportation Administration and U.S. Dept. of Energy to study use in subway cars, commuter trains, transit buses, autos, etc.

418. Lieb, John G. A COMPARATIVE ANALYSIS OF THE ENERGY CONSUMPTION OF SEVERAL URBAN PASSENGER GROUND TRANSPORTATION SYSTEMS. Washington, U.S. Dept. of Transportation, 1974. vi, 98 p. (TL151.6.L54) HQ

- 419. Meany, Judith A. ENERGY ALLOCATION IN THE URBAN TRANSPORTATION SECTOR. Sponsored by the U.S. Urban Mass Transportation Administration. Washington, Consortium of Universities, Urban Transportation Center, 1974. 70 p. (HE193.M32) HQ

 Because of importance of urban transportation during energy shortfalls, decision makers, both federal and local, allocate considerable attention to it at policy level. Legislation and implementation have fallen short.
- 420. Nagle, Steve and James Bogart. TRANSPORTATION ENERGY CONTINGENCY PLAN: A LIST OF ENERGY CONTINGENCY STRATEGIES. Financed in part by the U.S. Urban Mass Transportation Administration. St. Louis, East-West Gateway Coordinating Council, 1979. 126 p. (TJ163.5. T7N35) HQ
- 421. Organization for Economic Cooperation and Development. ENERGY PROBLEMS AND URBAN AND SUBURBAN TRANSPORT. Paris, OECD Road Research Group, 1978. 60 p. (HE4456.085) HQ

 Short and medium term measures which may bring about savings in urban transport sector.
- 422. Peskin, Robert L. and Joseph L. Schofer. THE IMPACTS OF URBAN TRANSPORTATION AND LAND USE POLICIES ON TRANSPORTATION ENERGY CONSUMPTION. Washington, U.S. Dept. of Transportation, Research and Special Programs Administration, Office of University Research, Apr. 1977. xv, 195 p. DOT-TST-77-85. (HE18.5.A39 no. DOT-TST-77-85) HQ PB-282 241

 Explores relationships between energy consumption in urban passenger travel, land use, transportation system characteristics, and travel behavior.
- 423. Rand Corporation. THE REGIONAL IMPACTS OF NEAR-TERM TRANSPORTATION ALTERNATIVES A CASE STUDY OF LOS ANGELES. Prepared for the Southern California Association of Governments; financed by a grant from the U.S. Urban Mass Transportation Administration. Santa Monica, Calif., June, 1974. xviii, 129 p. R-1524-SCAG. (Q180.U5R25 no. R-1524-SCAG) HQ

 Evaluation of air quality and energy consumption impacts of alternative transportation strategies in the Los Angeles.
 - alternative transportation strategies in the Los Angeles region, as well as impacts on regional costs and transportation service.

 24. Raskin, Donald. ENERGY STORAGE PROPULSION SYSTEM FOR RAPID TRANSPORTATION.
- A24. Raskin, Donald. ENERGY STORAGE PROPULSION SYSTEM FOR RAPID TRANSIT CARS: TEST RESULTS AND SYSTEM EVALUATION: FINAL REPORT. Prepared by the New York State Dept. of Transportation. Washington, U.S. Urban Mass Transportation Administration, Office of Technology Development and Deployment, 1978. vii, 79 p. UMTA-NY-06-0006-78-1. (TF949.P8R283) HQ

- 425. Tassin, Y. Marchefert. ENERGY AND TIME SAVINGS ASSOCIATED WITH RAPID GROUND TRANSPORTATION SYSTEMS. Logistics and Transportation Review, v. 10(4), 1975: 327-334. HQ

 Implications of high-speed intercity transportation in an environment of world wide energy shortages.
- 426. U.S. Congress, Office of Technology Assessment. ENERGY, THE ECONOMY, AND MASS TRANSIT. Based on a study prepared by Skidmore, Owings and Merrill, and System Design Concept, Inc., and prepared at the request of the U.S. Congress, Senate, Committee on Appropriations, Transportation Subcommittee. Washington, U.S. Govt. Printing Office, 1975. xiii, 148 p. OTA-T-15. (HE4451.U482) HQ
- 427. U.S. Congressional Budget Office. URBAN TRANSPORTATION AND ENERGY: THE POTENTIAL SAVINGS OF DIFFERENT MODES. Prepared for the Committee on Environment and Public Works, U.S. Senate. 95th Congress, 1st Session. Committee Print no. 95-8. Washington, U.S. Govt. Printing Office, 1977. xix, 81 p. (TEA5000.U48) HQ
- 428. U.S. Dept. of Transportation. A REPORT ON ACTIONS AND RECOMMENDATIONS FOR ENERGY CONSERVATION THROUGH PUBLIC MASS TRANSPORTATION IMPROVEMENTS. Washington, 1974. 63 p. (HE18.5.A72) HQ
 Report of the Secretary of Transportation to the U.S. Congress pursuant to Section 8(b), Public Law 93-319, Energy Supply and Environmental Coordination Act of 1974.
- 429. Wright, Samuel and Leonard Hysong. AN ANALYSIS OF ALTERNATIVES FOR SERVICING WORK TRAVEL BY BUSES IN THE EVENT OF AN ENERGY CRISIS:
 A CASE STUDY OF WASHINGTON, D.C. Washington, Consortium of Universities, Urban Transportation Center, 1974. iv, 69 p. (HE4491.W3W85) HQ
 Recommends limited express service with restricted ridership in a 210 minute peak period, which would result in increase in total number of vehicle miles traveled, thereby increasing capacity of the system.
- 430. Yunker, Kenneth R. and Kumares C. Sinha. ENERGY CONSIDERATIONS IN URBAN TRANSPORTATION PLANNING. Traffic Quarterly, v. 29(4), Oct. 1975: 571-592. HQ

 Energy demand, oil supply and demand, energy use-efficiency, remedial measures.

MODES: WATER

- 431. Jewell, David A. ENERGY EFFICIENCY OF SEA AND AIR VEHICLES. Washington, U.S. Coast Guard, Office of Research and Development, 1978. vii, 56 p. (V393.A3U55 no. CG-D-15-79) HQ
- 432. THE U.S. INLAND WATERWAYS: EFFICIENT AND ENERGY-CONSERVING TRANSPORTATION. Marine Engineering/Log, v. 82(9), Aug. 1977: 33-47. HO

Inland ports, river industry, and barge lines are a \$175-billion investment. Intermodal transportation can work for benefit of all concerned.

PLANNING AND POLICY

- 433. Bohi, Douglas R. and Milton Russell. U.S. ENERGY POLICY:
 ALTERNATIVES FOR SECURITY. Baltimore, Johns Hopkins University
 Press, 1975. x, 131 p. (HD9502.U5B65) HQ, 10A
 Increased energy self sufficiency versus continuous
 access to adequate supply.
- 434. Corsi, Thomas M. and Milton E. Harvey. TRAVEL BEHAVIOR UNDER INCREASES IN GASOLINE PRICES. Traffic Quarterly, v. 31(4), Oct. 1977: 605-624. HQ, 10A

 Policy makers and planners must develop basis for understanding changes in travel patterns due to continuing increases in fuel prices.
- 435. Davis, David Howard. ENERGY POLITICS. New York, St. Martin's Press, 1974. 211 p. (HD9502.U52D39) HQ, 10A
 Energy crisis in terms of policy analysis.
- 436. ENERGY SHORTAGE GIVEN TOP PRIORITY IN DISCUSSION OF TRANSPORT POLICY. Traffic World, v. 172(10), Dec. 5, 1977: 23-24. HQ, 10A Deputy Secretary of Transportation Alan Butchman looks for new reform legislation for airline industry, bills revising highway grant programs.
- 437. Erickson, Edward W. and Leonard Waverman. THE ENERGY QUESTION: AN INTERNATIONAL FAILURE OF POLICY. Toronto, University of Toronto Press, 1974. 2 v. (HD9502.A2E85) HQ, 10A

 V. 1. The world. xxv, 379 p.

 V. 2. North America. xxiii, 391 p.

 Thirty-six papers on past and future trends in exploration, production and government policy, past mistakes and future options.
- 438. Evans, Douglas. WESTERN ENERGY POLICY: THE CASE FOR COMPETITION.

 New York, St. Martin's Press, 1979. 198 p. (HD9502.A2E93) HQ

 Examines relative performance of some of the major industrial countries in sphere of energy policy in order to suggest sort of framework best suited to maximum general benefit.
- 439. Ford Foundation, Energy Policy Project. A TIME TO CHOOSE:
 AMERICA'S ENERGY FUTURE. Cambridge, Mass., Ballinger Publishing
 Co., 1974. xii, 511 p. (HD9502.U52F68) HQ, 10A
 U.S. will have to make early and hard decisions on series of complicated issues if it is to avoid greater distress in the future than afflicted the nation during 1973-74. This is an analysis of such issues.

- 440. Fowler, John W. ENERGY AND THE ENVIRONMENT. New York, McGraw-Hill Book Co., 1975. ix, 496 p. (TJ153.F69) HQ, 10A

 "...There is often little rational connection between policies that govern the production and use of energy and the scientific knowledge upon which they ought to be based...This book is an effort to bridge the large and dangerous gap between science and public policy." Barry Commoner in Foreword.
- 441. Hammond, Allen Lee, and others. ENERGY AND THE FUTURE. Washington, American Association for the Advancement of Science, 1973. xii, 184 p. (HD9545.H27) HQ, 10A

 Assesses technologies and research developments that will be the basis for future energy policies. U.S. cannot afford to be without more energy options.
- 442. Hirst, Eric. TRANSPORTATION ENERGY CONSERVATION POLICIES. Science, v. 192(4234), Apr. 2, 1976: 15-20. HQ, 10A
 Higher gasoline taxes and new car fuel economy standards are effective energy saving policies.
- 443. Hoey, William P. III. TRANSPORTATION PLANNING AND THE ENERGY CRISIS. Urban Land, v. 33(2), Feb. 1974: 3-8. HQ

 Dimensions of the problem; Europe before 1970; transportation in Europe before 1970; factors not applicable in Europe; implications for the U.S.; land use implications for the U.S.; research needs.
- 444. INTERAGENCY STUDY OF POST-1980 GOALS FOR COMMERCIAL MOTOR VEHICLES. Draft report. Washington, U.S. Dept. of Transportation, June, 1976. 2 v. (TL230.178) HQ

 At request of the President's Energy Resources Council, the Secretary of Transportation headed a task force representing the following agencies: U.S. Dept. of Transportation, Federal Energy Administration, Environmental Protection Agency, Interstate Commerce Commission, the National Science Foundation, and the U.S. Postal Service. The study is concerned with motor vehicles, buses, and trucks, with gross vehicle weight ratings over 10,000 pounds. It is not an official policy statement of any of the participating agencies, but is to serve as a focus for policy development for all organizations which must deal with the energy problem.
- 445. Klebanoff, Shosana. MIDDLE EAST OIL AND U.S. FOREIGN POLICY, WITH SPECIAL REFERENCE TO THE U.S. ENERGY CRISIS. New York, Praeger Publishers, 1974. 288 p. (HD9576.N36K54) HQ, 10A

 Economically, oil is the moving power of modern industrial society. A nation must have a sound oil policy that links considerations of the availability of domestic oil resources with external factors that affect world supply and demand.

Mancke, Richard B. THE FAILURE OF U.S. ENERGY POLICY. New York, Columbia University Press, 1974. vi, 189 p. (HD9502.U52M27) HQ. 10A Contradictory policies have exacerbated energy problems.

Proposes reforms and new measures to remedy past and present failures.

- Mead, Walter J. ENERGY AND THE ENVIRONMENT: CONFLICT IN PUBLIC 447. POLICY. Washington, American Enterprise Institute for Public Policy Research, 1978. 3, 36 p. (HD9502.U52M43) HQ
- Mitre Corporation. TOWARDS AN ENERGY ETHIC. 448. McLean, Va., Mar. 1972. 34 p. M72-43. (IR 76-0792) 10A Implicit and underlying beliefs and concerns must be explicitly stated before disagreements as to nature or even existence of the problem can move toward resolution.
- Munson, Michael J. and Rasin K. Mufti. ASSESSING THE IMPACT OF TRANSPORTATION ENERGY POLICIES ON TRAVEL BEHAVIOR. Transportation Research, v. 13A(6), Dec. 1979: 407-416. HQ, 10A Examines a number of energy conservation policies and assesses, at a general level, their likely transportation impacts.
- 450. National Petroleum Council, Committee on U.S. Energy Outlook. U.S. ENERGY OUTLOOK. Washington, 1972. 381 p. (TJ153.N281) HQ, 10A
- 451. A summary. Washington, 1972. 134 p. (TJ153.N28) HQ, 10A Examines U.S. energy demand, supply, logistics, and financial requirements 1971-1985. Makes recommendations for national energy policy.
- National Research Council, Transportation Research Board. TRANS-PORTATION PROGRAMMING, ECONOMIC ANALYSIS, AND EVALUATION OF ENERGY Washington, National Academy of Sciences, 1976. CONSTRAINTS. iii, 66 p. Transportation Research Record 599. (TE5.3.H5A31 no. 599) HQ Thirteen papers on automobile, highway, urban transportation planning for energy conservation.
- Schelling, Thomas C. THINKING THROUGH THE ENERGY PROBLEM. Committee for Economic Development, Design Committee on Long Range Energy Policy, 1979. xi, 63 p. (HD9502.U52S45) HQ Purpose of study is to construct a conceptual framework for evaluating energy policy rather than to devise specific recommendations.

- 454. SEMINAR ON ENERGY POLICY: THE CARTER PROPOSALS. Edw. J. Mitchell, ed. Washington, American Enterprise Institute for Public Policy Research, 1979. 29 p. AEI Studies #252. (HD9502.U52S47) HQ
- 455. U.S. General Accounting Office. THE ECONOMIC AND ENERGY EFFECTS OF ALTERNATIVE OIL IMPORT POLICIES. Report to the Congress by the Comptroller General of the United States. Washington, 1979. x, 42 p. EMD-79-78. B-178205. (HE9566.U532) HO
- IMPROVED ENERGY CONTINGENCY PLANNING
 IS NEEDED TO MANAGE FUTURE ENERGY SHORTAGES EFFECTIVELY. Report
 to the Congress by the Comptroller General of the United States,
 Washington, 1978. viii, 53 p. EMD-78-106. B-178205.
 (TJ163.4.U6U492) HQ
- 457. Yager, Joseph A. and Eleanor B. Steinberg. ENERGY AND U.S. FOREIGN POLICY. Cambridge, Mass., Ballinger Publishing Co., 1974. 473 p. (HD9566.Y24) HQ, 10A

ANTAL MEDICAL

A report to the Energy Policy Project of the Ford Foundation.

RESEARCH AND DEVELOPMENT

- 458. Battelle Memorial Institute, Columbus Laboratories, Columbus, Ohio. ENERGY INFORMATION RESOURCES: AN INVENTORY OF ENERGY RESEARCH AND DEVELOPMENT INFORMATION RESOURCES IN THE CONTINENTAL UNITED STATES, HAWAII AND ALASKA. Washington, American Society for Information Science, 1975. vi, 207 p. (REF HD9502.U52B38) HQ Sponsored by Office of Science Information Service, National Science Foundation.
- 459. Campbell, M. Earl. THE ENERGY OUTLOOK FOR TRANSPORTATION IN THE UNITED STATES. Traffic Quarterly, v. 27(2), Apr. 1973: 183-209. HQ, 10A

 Need for a continuing, comprehensive, coordinated, cooperative program of research and development in all aspects of energy production, transmission, and use.
- 460. Guthrie, M. P. and others, eds. ENERGY RESEARCH AND DEVELOPMENT:
 A SELECTED READING LIST. Oak Ridge, Tenn., Oak Ridge National
 Laboratory, 1973. ix, 119, 99 p. ORNL-EIS-73-65 (Rev. 1)
 (Z5853.P83G88) HQ, 10A

 Designed to aid policymakers in the identification of
 promising areas for energy research and development, and
 the informed layman to orient himself in the field.
- 461. Holloman, John Herbert and Michel Grenon. ENERGY RESEARCH AND DEVELOPMENT. Cambridge, Mass., Ballinger Publishing Co., 1975. xxi, 264 p. (HD9502.U52H66) HQ, 10A

 A report to the Energy Policy Project of the Ford Foundation. Part 1. Proposal for a U.S. energy research and development policy. Part 2. Energy research and development in industrialized countries other than the U.S.
- 462. Mitre Corporation, McLean, Va. TRANSPORTATION ENERGY CONSERVATION:
 A PROGRAM PLAN OF POLICY-ORIENTED RESEARCH. Washington, U.S.
 Federal Energy Administration, Jan. 1975. 4, 66 p. (TL151.6.F82)
 HQ PB-240 734

 Presents proposed research program of 31 projects in six research areas for three fiscal years includes costs, scheduling, and detailed task descriptions.
- 463. Oak Ridge National Laboratory, Oak Ridge, Tenn. INVENTORY OF CURRENT ENERGY RESEARCH AND DEVELOPMENT. Prepared for the Subcommittee on Energy, Committee on Science and Astronautics, U.S. House of Reprensentatives. 93d Congress, 1st Session. Washington, U.S. Govt. Printing Office, 1974. 3 v. (TJ153.U54) HQ, 10A

 Report compiled with support of the National Science Foundation. Covers research on energy sources, uses, health and ecological effects from federal in-house and contractor laboratories,

universities, private industry, technical associations, private

utilities, and research laboratories.

464. Schurr, Sam H. ENERGY RESEARCH NEEDS. Prepared for the National Science Foundation. Washington, Resources for the Future, Inc., Oct. 1971. 900 p. in various pagings. (HD9545.S35) HQ, 10A PB-207 516

Identifies areas where research is needed such as forces that influence energy consumption, future of domestic mineral fuel reserves, research and development possibilities in energy production and use, environmental impacts of energy production and utilization.

- 465. Tilton, John E. U.S. ENERGY R & D POLICY: THE ROLE OF ECONOMICS. Washington, Resources for the Future, Inc., 1974. vii, 134 p. (HD9502.U52T56) HQ, 10A

 Supported by a grant from the National Science Foundation.
- 466. U.S. Atomic Energy Commission. THE NATION'S ENERGY FUTURE: A REPORT TO RICHARD M. NIXON, PRESIDENT OF THE UNITED STATES. Submitted by Dixy Lee Ray, Chairman. Washington, Dec. 1, 1973. 171 p. WASH-1281. (HD9545.A51) HQ, 10A

 Recommends a national energy research and development program and budget.
- 467. U.S. Congress, House, Committee on Science and Astronautics, Subcommittee on Aeronautics and Space Technology. AVIATION FUEL CONSERVATION RESEARCH AND DEVELOPMENT: REPORT. Committee Print. 93d Congress, 2d Session. Washington, U.S. Govt. Printing Office, 1974. v, 25 p. (TL704.7.U53) 10A

 Examines fuel for current and future subsonic aircraft, primarily from a technology point of view, to obtain understanding of what conservation measures can be attained by properly directed technology programs.
- 468. U.S. Energy Research and Development Administration. A NATIONAL PLAN FOR ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION: CREATING ENERGY CHOICES FOR THE FUTURE. Washington, 1975. 2 v. (HD9502.U52U52) HQ, 10A
 - V. 1. The plan.
 - V. 2. Program implementation.

Prepared in response to Section 6 of the Federal Nonnuclear Energy Research and Development Act of 1974. Updates to appear annually.

469. U.S. Environmental Protection Agency, Office of Energy, Minerals and Industry. WHO'S WHO IV IN THE INTERAGENCY ENERGY/ENVIRONMENT R&D PROGRAM. Washington, June 1978. iii, 32 p. EPA 600/9-78-002. (REF TJ163.2.U84) HQ, 10A PB-284 375

Directory providing means of access to information on specific projects currently underway within Interagency Program.

470. U.S. Transportation Systems Center, Cambridge, Mass. RESEARCH AND DEVELOPMENT OPPORTUNITIES FOR IMPROVED TRANSPORTATION ENERGY USAGE. Washington, U.S. Dept. of Transportation, Sept. 1972. 94 p. DOT-TSC-OST-73-14. (HE18.5.A35 no. DOT-TSC-OST-73-14) (IR 73-01489) HQ, 10A PB-220 612

Final report of Transportation Energy Panel. Suggested actions, both short and long term, to reduce dependence on imported petroleum.

SHORTAGES

- 471. Allvine, Fred C. and James M. Patterson. HIGHWAY ROBBERY: AN ANALYSIS OF THE GASOLINE CRISIS. Bloomington, Indiana University Press, 1974. xii, 261 p. (HD9564.A66) HQ, 10A
- 472. California, Dept. of Highway Patrol. ACCIDENT CHANGES UNDER ENERGY CRISIS: REPORT ON ACCIDENT REDUCTION VARIABLES. Sacramento, Calif., 1974. Various pagings. (TEA6090.C23) HQ Attempts to quantitatively explain unprecedented traffic accident decline experienced during first three months of 1974.
- 473. Congressional Quarterly, Inc. ENERGY CRISIS IN AMERICA.
 Washington, 1973. 93 p. (TJ153.C67) HQ, 10A
 Compilation of articles originally appearing in Congressional
 Quarterly Weekly Report and Editorial Research Reports
 treating crisis, prices, resources, ecology, legislation,
 options.
- 474. THE ENERGY CRISIS: ALTERNATIVES FOR TRANSPORTATION. Automotive Engineering, v. 81(3), Mar. 1973: 40-44. HQ, 10A

 Environmental concerns, safety and damageability regulations are driving up fuel consumption at the same time that fuel availability is decreasing.
- 475. THE ENERGY CRISIS: REALITY OR MYTH. Robert M. Lawrence and Norman J. Wengert, eds. Philadelphia, American Academy of Political and Social Science, 1973. x, 264 p. (H1.A4 v. 410) 10A Essays with varying perspectives to help assess economic, security, and environmental costs and trade-offs in making energy decisions.
- 476. French, Alexander. HIGHWAY PLANNING AND THE ENERGY CRISIS. Washington, U.S. Federal Highway Administration, 1973. 28 p. (HD9545.F84) HQ Paper presented at 1973 Spring Training Conference, Office of Emergency Transportation, FHWA Region 7, Kansas City, Mo.
- 477. FUEL CRISIS NEED NOT DOOM GENERAL AVIATION. Airport Services Management, v. 15(1), Jan. 1974: 24-25. 10A
 Statement by Ed Stimpson of the General Aviation Manufacturers
 Association (GAMA).
- 478. THE FUEL PINCH. Business and Commercial Aviation, v. 33(6), Dec. 1973: 37-42. 10A

 Problems which can be expected to develop and possible ways to alleviate the shortage.
- , PART II. Business and Commercial Aviation, v. 34 (1), Jan. 1974: 46-48. 10A Government fuel allocation plans.

- 480. , PART III. Business and Commercial Aviation, v. 35(1),

 July 1974: 60-62. 10A

 Outlook for future supplies and prices.
- 481. GAS SHORTAGES FOR AEROSPACE FIRMS. Aviation Week and Space Technology, v. 110(22), May 28, 1979: 32. HQ, 10A

 Companies suffer tight supplies of gasoline for internal operations and jet fuel for test flights.
- 482. Iskandar, Marwan. THE ARAB OIL QUESTION. 2d ed. Beirut, Middle East Economic Consultants, 1974. 138 p. (HD9578.A72186) HQ, 10A
 Unfolding of the energy crisis and its relation to economic development internationally.
- 483. Lenorovitz, Jeffrey M. GASOLINE SHORTAGE COULD SPUR AIR TRAFFIC.

 Aviation Week and Space Technology, v. 110(20), May 14, 1979:
 27-28. HQ, 10A

 Case in point in California short-haul markets and where auto use has been tradition.
- 484. Leonard, Daniel. ENERGY UPDATE: COMING ERA OF SHORTAGE. Professional Pilot, v. 13(3), Mar. 1979: 57, 58, ff. 10A

 Aviation must brace itself for some very unpleasant developments.
- 485. Mosley, Leonard. POWER PLAY; OIL IN THE MIDDLE EAST. New York, Random House, 1973. xxi, 457 p. (HD9576.N36M68) HQ, 10A
 A journalist's look at the continuing Middle East oil crisis.
- 486. National Petroleum Council, Committee on Emergency Preparedness.

 EMERGENCY PREPAREDNESS FOR INTERRUPTION OF PETROLEUM IMPORTS INTO THE
 UNITED STATES. Washington, 1974. 142 p. (HD9566.N282) HQ, 10A

 Assesses U. S. capability to cope with sudden but temporary
 interruption of energy supplies, and to review options to
 minimize the impact of such an interruption.
- 487. Opinion Research Corp. CONSUMER ATTITUDES TOWARD GASOLINE PRICES, SHORTAGES, AND THEIR RELATIONSHIPS TO INFLATION. Princeton, N. J. 1975. iii, 25 p. (HD9502.U52075) HQ PB-246 984

 Prepared for the Office of Energy Conservation and the Environment.
- 488. PERSPECTIVES ON THE ENERGY CRISIS. Howard Gordon and Roy Meador, eds. Ann Arbor, Mich., Ann Arbor Science Publishers, Inc., 1977. 2 v. (TJ163.2.P48) HQ

 Selected government and private reports on energy to assist engineers, scientists, businessmen in planning to meet energy challenges of the future.

- 489. Peskin, Robert L., and others. THE IMMEDIATE IMPACT OF GASOLINE SHORTAGES ON URBAN TRAVEL BEHAVIOR. Prepared for the U.S. Federal Highway Administration. Evanston, Ill., Northwestern University, 1975. v, 146 p. (HE305.P48) HQ

 Only an artificially constrained supply of gasoline, rather than modestly increased prices, seems promising control for consumption.
- 490. Ridgeway, James and Bettina Conner. NEW ENERGY: UNDERSTANDING THE CRISIS AND A GUIDE TO AN ALTERNATIVE ENERGY SYSTEM. Boston, Beacon Press, 1975. xiii, 224 p. (HD9502.U52R53) HQ, 10A
- 491. U.S. Federal Aviation Administration, Office of the Associate Administrator for Plans. PRELIMINARY ASSESSMENT OF THE IMPACT OF THE FUEL CRISIS ON GENERAL AVIATION. Washington, Mar. 1974. 49 p. (IR 74-1320) 10A

 Long term outlook determined by availability and price of fuel; even limited shortages will have negative effect on sales and flying growth.
- 492. U.S. National Highway Traffic Safety Administration, Office of Statistics and Analysis. THE EFFECT OF THE FUEL SHORTAGE ON TRAVEL AND HIGHWAY SAFETY. Washington, Aug. 1975. v, 49, 10 p. DOT-HS-801 715. (TEA6017.U67 no. DOT-HS-801 715) HQ PB-245 012

 Based on data for 1973 and 1974 with major emphasis on safety and conservation effect of 55 mph national speed limit.
- 493. Wood, P. W. J. WORLD PETROLEUM POTENTIAL: THERE'S A TRILLION BARRELS OF OIL AWAITING DISCOVERY. World Oil, v. 188(7), Ju ne 1979: 141-146, ff. HQ

 Physically there is no shortage; this can be statistically and geologically demonstrated. Resources are sufficient to allow orderly transition over next 50 years to alternate sources.

STATISTICS

- 494. Baade, Patricia. DIRECTORY OF INTERNATIONAL ENERGY STATISTICS.
 Washington, IES Publishing Co., 1976. 96 p. (REF Z5853.P83B23)
 HQ, 10A
 Listing of energy data sources on oil and gas; solid fuels,
- electric energy and nuclear; geothermal, solar; oil shale.

 495. Hoch, Irving Joseph. ENERGY USE IN THE UNITED STATES BY STATE
- AND EXPENDITURES. Washington, Resources for the Future, 1978.

 XIII, 737 p. RFF Research Paper R-9. (HD9502.H63) HQ
- 496. Organization for Economic Cooperation and Development. ENERGY STATISTICS, 1973-1975. Paris, 1976. 241 p. (REF HD9540.4.073) HQ Chiefly tables.
- 497. ENERGY STATISTICS, 1974-1976. Paris, 1978. xvi, 192 p. (REF HD9540.4.073) HQ
- 498.

 . STATISTICS OF ENERGY

 1960-1974. Paris, 1975. 281 p. (REF HD 9540.4.073) HQ

 Tables cover all commercial sources of energy, both primary and secondary, and final consumption in such sectors as transportation, industry, etc.
- 499. Seiferlein, Katherine E. MOTOR GASOLINE SUPPLY AND DEMAND, 1967-1978. Washington, U.S. Dept. of Energy, Energy Information Administration, Aug. 1978. 36 p. (TP692.2.S45) HQ Mostly tables.
- 500. TRANSPORTATION ENERGY CONSERVATION DATA BOOK. Ed. 3. Oak Ridge, Tenn., Oak Ridge National Laboratory, 1979. xxv, 541 p. ORNL-5320. (REF HD9502.U52T82) HQ
 Statistics on major transportation modes, energy characteristics, energy conservation alternatives, and applicable factors influencing performance in the transportation sector.
- 501. U.S. Bureau of the Census. ENERGY STATISTICS DATA FINDER. Washington, 1978. 32 p. (REF HA 195.U525) HQ Chiefly tables.
- 502. U.S. Dept. of Transportation. ENERGY STATISTICS. A supplement to the Summary of National Transportation Statistics. Washington, 1973-(HE206.2.U675) Included in DOT-TSC-OST-yr. no. report series.

 Annual compendium of time-series data on transportation, production, processing, and consumption of energy.

INDEX: INDIVIDUAL

Individual	Item No.
Aarons, Richard N.	281
Abelson, Philip H.	1
Abrahamson, Bernhard J.	68
Allvine, Fred C.	471
Archibald, Robert B.	267
Arnold, Eugene D.	50
Askin, A. Bradley	113
·	113
Baker, John	164
Barker, William G.	405
Bartholomew, D. P.	183
	200
Beade, Patricia	494
Bearden, William O.	105
Bernard, Martin Joseph	406, 407
Bloch, Carolyn C.	208
Bogart, James	420
Bohi, Douglas R.	433
Brewer, G. Daniel	165, 166, 172
Brown, Lester R.	339, 340
Buckley, Frank T.	363
Buffington, Jesse L.	320
Burbank, Cynthia J.	53
Burton, H. Robert	24
0.11	
Callahan, Joseph M.	341
Campbell, Edward A.	365
Campbell, M. Earl	459
Chambers, R. S.	167
Chausse, Ron	168
Churchill, A. V.	169
Claffey, Paul J.	367
Clark, Philip H.	78
Clark, Ron	321
Cloutier, Roger L.	9
Coan, Howard	344
Commoner, Barry	2
Conant, Melvin A.	3
Conner, Bettina	490
Connery, Robert H.	18
Cooke, Henry R.	408
Cooper, Lawrence C.	405, 409
Cope, Edwin M.	79
Corsi, Thomas M.	434
Crable, David	22
Creswick, F. A.	322
Darmstadton Isal	
Darmstadter, Joel David, David Howard	80
David, David noward	435

Individual	Item No.
Davis, W. Jackson Dudas, Janice L.	131 8
Duggan, Jerome L. Dyer, Calvin R.	9 270
Easingwood-Wilson, D.	81
Eccleston, B. H.	368
Edwards, Jerry L.	410
Erickson, Edward W.	437
Erlbaum, Nathan S.	369
Escher, William J. D.	172
Evans, Douglas	438
Evans, Leonard	82
Ezzati, Ali	10
Farmer, Richard	109
Finger, Harold B.	272
Fisher, John Crocker	11
Fishwick, John P.	323
Flachsbart, Peter C.	55
Fowler, John W.	440
French, Alexander	56, 346, 476
Fried, Edward R.	112
Fulton, Ken	110
Gaffney, Gerald P.	212
Galliker, J. Paul	111
Gambaccini, Louis J.	27
Garrison, Paul	290
Garrison, William L.	412
Gilmour, Robert S.	18
Goeller, Harold E.	23
Gold, Fern Racine	3
Gordon, Howard	488
Goss, W. P. Gray, D. E.	28
Greene, D. L.	292
Grenon, Michel	58, 84, 85 461
Grey, Jerry	205
Griffin, James M.	138
Gunnarsson, S. Olaf	249
Guthrie, M. P.	460
Hackleman, Michael A.	375
Hackney, David	414
Hammond, Allen Lee	441
Harman, R. G.	250, 251
Harvey, Milton E.	434
Hass, Jerome E.	104
Hayes, Earl T.	139

Heiman, Grover Hirst, Eric Hoch, Irving Joseph Hocy, William P. III Hoheisel, Robert Holloman, John Herbert Holloman, John Herbert Holloman, John B. Husted, Robert A. Hysong, Leonard Hysong, Leonard Ichniowski, Tom Iskandar, Marwan Jacklin, D. Jacklin, D. Jacklin, D. Jacops, Marie-Annick Jewell, David A. Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Lawson, L. J. Larson, George Lawrence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McMahon, Noel McMann, a, John E. McMann, Noel McMannara, John E. McMann, Noel McMannara, John E. McMannara, None	Individual	Item No.
Hirst, Eric 59, 86, 348, 442 Hoch, Irving Joseph 495 Howy, William P. III 443 Hoheisel, Robert 349 Holloman, John Herbert 461 Hopkins, John B. 324 Husted, Robert A. 29 Hysong, Leonard 429 Ichniowski, Tom 325 Iskandar, Marwan 482 Jacklin, D. 404 Jacops, Marie-Annick 114 Jewell, David A. 431 Jilek, Glenn 31 Jones, David W., Jr. 412 Joskow, Paul L. 180 Kearney, A. T. Keith, R. A. 416 Klebanoff, Shosana 445 Kouskoulas, Vasily 32 Labelle, Sarah J. 45 Lawson, L. J. 417 Lenorovitz, Jeffrey M. 483 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 36 McBenny, John P., Jr. McMahon, Noel 400 McMahon, Noel 400 McMahon, Noel 400 McMahan, John E. 300	Heiman, Grover	175 176 177 213
Hoch, Irving Joseph Hoey, William P. III Hoheisel, Robert Holloman, John Herbert Holloman, John Herbert Holloman, John B. Husted, Robert A. Hysong, Leonard Ichniowski, Tom Iskandar, Marwan Jacklin, D. Jacklin, D. Jacops, Marie-Annick Jilek, Glenn Jones, David A. Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Keith, R. A. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Lawence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Lewis, John Hiram III Levy, Robert Lewis, John Hiram III Levy, Robert Lewis, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McMennon, Noel McMahon, Noel McMahon, Noel McMamara, John E. 329 Haft Holloman	•	
Hoey, William P. III Hoheisel, Robert Holloman, John Herbert Holloman, John Herbert Holloman, John B. Husted, Robert A. Husted, Robert A. Hysong, Leonard Hysong, Leonard Ichniowski, Tom Iskandar, Marwan Jacklin, D. Jacops, Marie-Annick Jewell, David A. Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Larson, George Lawrence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Levy, Robert Levy, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McMenny, John P., Jr. McMahon, Noel		
Hoheisel, Robert 349 Holloman, John Herbert 461 Hopkins, John B. 324 Husted, Robert A. 29 Hysong, Leonard 429 Ichniowski, Tom 325 Iskandar, Marwan 482 Jacklin, D. 404 Jacops, Marie-Annick 114 Jewell, David A. 431 Jilek, Glenn 31 Jones, David W., Jr. 412 Joskow, Paul L. 180 Kearney, A. T. 350 Kearney, A. T. 416 Kiebanoff, Shosana 445 Kouskoulas, Vasily 32 Labelle, Sarah J. 70, 407 Larson, George 181 Lawrence, Robert M. 475 Lawson, L. J. 417 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 33 McBride, Richard 22 McMelon, Noel 34		
Holloman, John Herbert Hopkins, John B. Hosted, Robert A. Hysong, Leonard Ichniowski, Tom Iskandar, Marwan Jacklin, D. Jacops, Marie-Annick Jewell, David A. Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Lawrence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Levy, Robert Levy, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McMahon, Noel		
Hopkins, John B. Husted, Robert A. Husted, Robert A. Hysong, Leonard Lehniowski, Tom Iskandar, Marwan Jacklin, D. Jacklin, D. Jacops, Marie-Annick Jewell, David A. Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Kiebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Larson, George Lawrence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Levy, Robert Levy, Robert Levy, Robert Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McMahon, Noel		
Husted, Robert A. Hysong, Leonard Hysong, Leonard Hysong, Leonard Ichniowski, Tom Iskandar, Marwan Jacklin, D. Jack		
Hysong, Leonard Ichniowski, Tom Iskandar, Marwan Jacklin, D. Jacops, Marie-Annick Jewell, David A. Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Larson, George Labelle, Sarah J. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Lewy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McMehon, Noel McMahon, Noel		
Ichniowski, Tom Iskandar, Marwan Jacklin, D. Jacops, Marie-Annick Jewell, David A. Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Larson, George Lawrence, Robert M. Larson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 404 J404 J404 J405 J407 J407 J407 J407 J407 J407 J407 J407		
Iskandar, Marwan 482 Jacklin, D. 404 Jacops, Marie-Annick 114 Jewell, David A. 431 Jilek, Glenn 31 Jones, David W., Jr. 412 Joskow, Paul L. 180 Kearney, A. T. 350 Keith, R. A. 416 Klebanoff, Shosana 445 Kouskoulas, Vasily 32 Labelle, Sarah J. 70, 407 Larson, George 181 Lawrence, Robert M. 475 Lawson, L. J. 417 Lenorovitz, Jeffrey M. 483 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 33 McBride, Richard 22 McGowan, J. G. 28 McHenry, John P., Jr. 140 McMahon, Noel 34 McNamara, John E. 300	0 8,	423
Iskandar, Marwan 482 Jacklin, D. 404 Jacops, Marie-Annick 114 Jewell, David A. 431 Jilek, Glenn 31 Jones, David W., Jr. 412 Joskow, Paul L. 180 Kearney, A. T. 350 Keith, R. A. 416 Klebanoff, Shosana 445 Kouskoulas, Vasily 32 Labelle, Sarah J. 70, 407 Larson, George 181 Lawrence, Robert M. 475 Lawson, L. J. 417 Lenorovitz, Jeffrey M. 483 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 33 McBride, Richard 22 McGowan, J. G. 28 McHenry, John P., Jr. 140 McMahon, Noel 34 McNamara, John E. 300	Ichniowski. Tom	725
Jacklin, D. Jacops, Marie-Annick Jewell, David A. Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Lawrence, Robert M. Lawrence, Robert M. Lawrence, Robert M. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Levy, Robert Levy, Robert Levy, Robert Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McGowan, J. G. McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 431 442 443 446 445 445 445 445 445 445 447 447 447 447		
Jacops, Marie-Annick Jewell, David A. Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Lawson, George Lawrence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 114 431 431 431 431 431 442 442	, 1001	402
Jacops, Marie-Annick Jewell, David A. Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Lawson, George Lawrence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 114 431 431 431 431 431 442 442	Jacklin. D.	404
Jewell, David A. 431 Jilek, Glenn 31 Jones, David W., Jr. 412 Joskow, Paul L. 180 Kearney, A. T. 350 Keith, R. A. 416 Klebanoff, Shosana 445 Kouskoulas, Vasily 32 Labelle, Sarah J. 70, 407 Larson, George 181 Lawrence, Robert M. 475 Lawson, L. J. 417 Lenorovitz, Jeffrey M. 483 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 33 McBride, Richard 22 McGowan, J. G. 28 McHenry, John P., Jr. 140 McMahon, Noel 34 McNamara, John E. 300		
Jilek, Glenn Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Larson, George Lawrence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 31 412 412 412 412 412 412 412 412 416 416 416 416 416 417 417 417 417 417 417 418 418 418 418 418 418 418 418 418 418		
Jones, David W., Jr. Joskow, Paul L. Kearney, A. T. Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Larson, George Lawrence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 350 416 447 445 447 447 447 447 448 448		
Joskow, Paul L. 180 Kearney, A. T. 350 Keith, R. A. 416 Klebanoff, Shosana 445 Kouskoulas, Vasily 32 Labelle, Sarah J. 70, 407 Larson, George 181 Lawrence, Robert M. 475 Lawson, L. J. 417 Lenorovitz, Jeffrey M. 483 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 33 McBride, Richard 22 McGowan, J. G. 28 McHenry, John P., Jr. 140 McMahon, Noel 34 McNamara, John E. 3000		
Kearney, A. T. 350 Keith, R. A. 416 Klebanoff, Shosana 445 Kouskoulas, Vasily 32 Labelle, Sarah J. 70, 407 Larson, George 181 Lawrence, Robert M. 475 Lawson, L. J. 417 Lenorovitz, Jeffrey M. 483 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 33 McBride, Richard 22 McGowan, J. G. 28 McHenry, John P., Jr. 140 McMahon, Noel 34 McNamara, John E. 300		
Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Larson, George Lawrence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 445 445 445 445 445 447 447 44	obbiony rada no	180
Keith, R. A. Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. Larson, George Lawrence, Robert M. Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 445 445 445 445 445 447 447 44	Kearney, A. T.	750
Klebanoff, Shosana Kouskoulas, Vasily Labelle, Sarah J. 70, 407 Larson, George 181 Lawrence, Robert M. 475 Lawson, L. J. 417 Lenorovitz, Jeffrey M. 483 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 33 McBride, Richard 22 McGowan, J. G. 28 McHenry, John P., Jr. 140 McMahon, Noel 34 McNamara, John E. 300		
Kouskoulas, Vasily Labelle, Sarah J. 70, 407 Larson, George 181 Lawrence, Robert M. 475 Lawson, L. J. 417 Lenorovitz, Jeffrey M. 483 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 33 McBride, Richard 22 McGowan, J. G. 28 McHenry, John P., Jr. 140 McMahon, Noel 34 McNamara, John E. 300		
Labelle, Sarah J. 70, 407 Larson, George 181 Lawrence, Robert M. 475 Lawson, L. J. 417 Lenorovitz, Jeffrey M. 483 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 33 McBride, Richard 22 McGowan, J. G. 28 McHenry, John P., Jr. 140 McMahon, Noel 34 McNamara, John E. 300		
Larson, George Lawrence, Robert M. Lawrence, Robert M. Lawrence, Robert M. Lawrence, Robert M. Lawrence, Robert M. Lenorovitz, Jeffrey M. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McMahon, Noel McManara, John E. 181 475 487 488 484 484 484 Levy, Robert 182 294 418 418 418 419 418 419 418 419 419	, vasily	32
Larson, George Lawrence, Robert M. Lawrence, Robert M. Lawrence, Robert M. Lawrence, Robert M. Lawrence, Robert M. Lenorovitz, Jeffrey M. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McMahon, Noel McManara, John E. 181 475 487 488 484 484 484 Levy, Robert 182 294 418 418 418 419 418 419 418 419 419	Labelle, Sarah J.	70 407
Lawrence, Robert M. 475 Lawson, L. J. 417 Lenorovitz, Jeffrey M. 483 Leonard, Daniel 484 Levy, Robert 182 Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. 14 Lukasiewicz, J. 33 McBride, Richard 22 McGowan, J. G. 28 McHenry, John P., Jr. 140 McMahon, Noel 34 McNamara, John E. 300		
Lawson, L. J. Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 417 417 418 418 484 484 484 484 484 484 484 484		
Lenorovitz, Jeffrey M. Leonard, Daniel Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 483 484 484 484 484 485 486 487 488 488 488 489 489 480 481 481 481 481 481 481 481		
Leonard, Daniel Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E.		
Levy, Robert Lewis, John Hiram III Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 182 182 184 182 184 294 184 182 184 294 184 182 184 182 184 184 184 18		
Lewis, John Hiram III 294 Lieb, John G. 418 Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 394 418 22 28 418 41 41 41 41 41 41 41 41		
Lieb, John G. Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E.		
Loftness, Robert L. Lukasiewicz, J. McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E.		
Lukasiewicz, J. 33 McBride, Richard 22 McGowan, J. G. 28 McHenry, John P., Jr. 140 McMahon, Noel 34 McNamara, John E. 300		
McBride, Richard McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 22 McHenry 28 McHenry 34 McNamara, John E.		
McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 28 140 34 McNamara, John E.		33
McGowan, J. G. McHenry, John P., Jr. McMahon, Noel McNamara, John E. 28 140 34 McNamara, John E.	McBride, Richard	0.0
McHenry, John P., Jr. McMahon, Noel McNamara, John E. 140 34 McNamara, John E.		
McMahon, Noel 34 McNamara, John E. 300		
McNamara, John E. 300	McMahon, Noel	
.)()()		
MCNETHEV. N. C.	McNerney, N. C.	
MoPag. Alexander	McRae, Alexander	
Mancke Dichard D	Mancke, Richard .B.	
Mangala D I		
Masefield Sin Daton	Masefield, Sir Peter	•
184		184

Individual	Item	No.
Mead, Walter J.	447	
Meader, Marion W.	386	
Meador, Roy	488	
Meaney, Judith A.	419	
Merklein, Helmut A.	116	
Miller, Roger LeRoy	117	
Mitchell, Edward J.	454	
Mittal, Ram K.	37	
Mohleji, S. C.	304	
Mosley, Leonard	485	
Moss, Frank	305	
Multi, Rasin K.	449	
Munson, Michael J.	449	
Murphy, Joseph S.		110
Myers, Edward T.	118,	119
Mycrs, Edward 1.	326	
Noole Cham		
Nagle, Steve	420	
Neveu, Alfred J.	39	
Newman, Martin	205	
Noreng, Øystein	145	
Norton, Hugh S.	327	
Oguchi, Yasubei	96	
Ortiz, René G.	146	
Osborne, Richard	31	
O'Toole, James	20	
Ott, James	147	
·	141	
Papedes, Daniel N.	15	
Patterson, James M.	15	
Persson, Filkand Bo	471	
Peskin, Robert L.	249	
Peterson, Francis S.	422,	489
Pindyck, Robert S.	40	
	180	
Plum, Roger	383	
Pole, Nicholas	353	
Polishuk, Paul	65	
Ponte, J., Jr.	214	
Randell, M. A. L.	310	
Raskin, Donald	424	
Rechel, Ralph E.	215	
Reece, William S.	267	
Reistrup, P. H.	330	
Rek, Bron	120	
Reynolds, Reid		
Rice, Richard A.	94	
Ridgeway, James	148	
Rifaï, Taki	490	
	121	
Rose, A. B.	261,	262
Russell, Milton	433	

To divide 1		
Individual	Item	No.
Sano, Masahide	96	
Sanson, Robert L.	43	
Schelling, Thomas C.	453	
Schofer, Joseph L.	422	
Schultze, Charles L.	112	
Schurr, Sam H.	464	
Seiferlein, Katherine E.	499	
Sen, Ashish	97	
Shaw, Robert R.	275	
Sheahan, Richard Thomas	263	
Shinnar, Reuel	355	
Sikorsky, Robert	388	
Sinha, Kumares C.	430	
Soot, Siim		
Steinberg, Eleanor B.	97	
Stimpson, Ed	457	
Stobaugh, Robert	477	
Stork, Eric 0.	135	
Stucker, James Perry	245	
Suetsugu, Katsuhiko	122	
	356	
Sullivan, Thomas F. P. Sweetman, Bill	16	
Sweetman, Bill	190,	191
Tallon, Peter		
Talukdar, Sarosh N.	123	
	333	
Tassin, Y. Marchefert	425	
Tilton, John E.	465	
Travis, Claude	99	
Tuininga, E. J.	264	
Udall, Stewart L.	21	
,	21	
Wade, Nicholas	206	
Walbridge, Edward W.	338	
Warren, Charles	155	
Waverman, Leonard	437	
Wengert, Norman J.	475	
Wilkinson, Kenneth	318	
Williams, T.	103,	404
Winant, John H.	279	104
Winger, John G.	49	
Wood, P. W. J.		
Worthy, Ward	493	
Worthy, Ward Wright, Samuel	493 207	
	493 207 429	
Wright, Samuel Wylie, Lyle D.	493 207	
Wright, Samuel Wylie, Lyle D. Yager, Joseph A.	493 207 429	
Wright, Samuel Wylie, Lyle D. Yager, Joseph A. Yergin, Daniel	493 207 429 346	
Wright, Samuel Wylie, Lyle D. Yager, Joseph A.	493 207 429 346 457	

INDEX: CORPORATE SOURCE

SOURCE	ITEM NO.
Aerospace Corporation Air Transport Association of America Aircraft Owners and Pilots Association	246, 319, 361 130 283
American Association for the Advancement of Science American Enterprise Institute for Public Policy Research	1, 441 447, 454
American Institute of Aeronautics and Astronautics American Society for Information Science	205, 212, 268, 272, 284 458
American Society of Civil Engineers	45
Argonne National Laboratory	70
Atlantic Richfield Company	162
Automobile Club of Southern California	362
BRI Systems, Inc.	51, 52
Battelle Laboratories	322, 458
Boeing Commercial Airplane Company	247, 248, 285
Boeing Vertol	288
Brookings Institution	4, 112
California Dept. of Highway Patrol	472
California Institute of Technology	41, 75, 76
Cambridge Systematics	364
Carnegie Mellon University	45, 333
Center for Compliance Information	8
Charles River Associates	106, 209, 342, 343, 366
Chicago Regional Transportation Authority	407
Committee for Economic Development	170, 453
Congressional Quarterly, Inc.	473
Conservation Foundation	215
Council on Foreign Relations	145
Cryogenic Engineering Conference	194
Delta Research Corporation	132
East-West Gateway Coordinating Council	420
Edison Electric Institute	212, 272
Electric Power Research Institute	88
Environment Information Center, Inc.	5, 6, 7
Environmental Impact Center	345
Escher Technology Associates	271
European Community Institute for University Studies	4
Exxon Corporation	137
Ford Foundation	104, 136, 439, 457

SOURCE	ITEM NO.
General Electric Company General Motors Corporation Government Institutes, Inc. Grey Advertising, Inc. Gulf Research and Development Company	291, 413 83 16 371, 372 373
Honeywell, Inc.	87
Institute of Electrical and Electronics Engineers Institute of Gas Technology Institute of Transportation Studies International Civil Aviation Organization International Institute for Applied Systems Analysis International Road Transport Union Interplan Corporation, Inc.	212, 272 178 412 179 151 253 415
Japan Economic Research Center	4
Little (Arthur D.) Inc. Lockheed Aircraft Corporation Lockheed-California Company	352, 377, 378 295, 296, 297 298, 299
Massachusetts Institute of Technology Metropolitan Association of Urban Designers and Environmental Planners Metropolitan Washington Council of Governments Mitre Corporation	89, 115 45 78 36, 90, 142, 254, 302, 303, 386, 448, 462
National Academy of Engineering National Academy of Political Science National Academy of Sciences National Air Transportation Association National Business Aircraft Association National Petroleum Council National Research Council Transportation Research Board National Science Foundation National Transportation Policy Study Commission New York State Dept. of Transportation Planning Division North Atlantic Treaty Organization	17 18 19, 91, 452 185, 306 279 61, 62, 63, 450, 451, 486 19, 38, 64, 91, 255, 452 38, 64, 255, 452 66, 86, 89, 258, 259, 354, 444, 458, 463, 464 143, 144 39, 369, 424 39
Advisory Group for Aerospace Research and Development	186, 187, 292
North Central Texas Council of Governments Noyes Data Corporation	409 208
Oak Ridge Associated Universities Oak Ridge National Laboratory	9 58, 84, 86, 92, 132, 256, 261, 262, 273, 307, 348, 460, 463, 500

SOURCE	ITEM NO.
Opinion Research Corporation	487
Organization for Economic Cooperation	421, 496, 497, 498
and Development	421, 490, 497, 496
The state of the s	
Peat, Marwick, Mitchell and Company	257
Pratt and Whitney Aircraft	308, 309
Public Technology, Inc.	66, 67
Dond Commonation	77 722 722 723
Rand Corporation	41, 42, 122, 258, 259,
Research Applied to National Needs (RANN) Program	354, 423
Resources for the Future	66, 86, 348 80, 88, 136, 464, 465, 405
Rockefeller Foundation	80, 88, 136, 464, 465, 495 13
Rocky Mountain Energy Economics Institute	68
Ross (Howard R.) Associates	95
Royal Aeronautical Society	268, 273
St. Louis Area Council of Governments	133
Skinner, R. E.	416
Society of Automotive Engineers	25, 384
Southern California Association of Governments	95
Stanford Research Institute	149, 276
Texas A&M University	700
Texas Transportation Institute	320
Transport and Road Research Laboratory	320
Transportation Research Institute	81, 103 45, 333
1	40, 000
Union Carbide Corporation	194
Union College	37, 337
United Airlines	124
United Nations Institute for Training	151
and Research (UNITAR)	
U.S. Atomic Energy Commission	466
U.S. Bureau of the Census	501
U.S. Central Intelligence Agency U.S. Citizens Advisory Committee on Environmental	152
Quality	71
U.S. Coast Guard	431
U.S. Congress, House	431
Committee on Appropriations	90
Committee on Interstate and Foreign Commerce	154, 238
Committee on Public Works and Transportation	277
Committee on Science and Astronautics	463, 467
U.S. Congress, Office of Technology Assessment	426
U.S. Congress, Senate	
Committee on Appropriations	195, 426
Committee on Energy and Natural Resources	125
Committee on Environment and Public Works Committee on Finance	427
Committee on Interior and Insular Affairs	237
U.S. Congressional Budget Office	201
	427

SOURCE	ITEM NO.
U.S. Dept. of Energy	37, 58, 92, 109, 111, 196,
	197, 205, 261, 262, 347, 368, 371, 372, 373
U.S. Dept. of Interior	153
U.S. Dept. of Transportation	29, 39, 46, 47, 48, 51, 52, 72, 75, 76, 101, 102, 115, 149,
	150, 204, 209, 217, 218,
	218a, 219, 257, 265, 266,
	337, 345, 352, 358, 359, 361, 362, 377, 378, 384,
	390, 391, 393, 418, 422,
Federal Aviation Administration	428, 444, 470, 502 90, 100, 126, 221, 222, 223,
	278, 302, 303, 311, 312, 313,
Federal Highway Administration	314, 315, 316, 491
	31, 46, 47, 50, 79, 87, 133, 346, 367, 392, 476, 489
Federal Railroad Administration National Highway Traffic Safety Administration	319, 324, 332, 335, 336
Macronal Highway Traffic Safety Administration	342, 343, 357, 368, 394, 395, 396, 397, 398, 492
Research and Special Programs Administration	29, 422
Transportation Systems Center	48, 101, 242, 243, 266, 358, 359, 384, 399, 400, 401, 470
University Research Program	115
Urban Mass Transportation Administration	46, 102, 133, 364, 402, 413,
U.S. Energy Research and Development Administration	415, 419, 420, 423, 424 246, 384, 468
Office of University Research U.S. Environmental Protection Agency	9
U. S. Executive Office of the President	19, 377, 391, 444, 469 74, 220
Emergency Preparedness Energy Planning and Policy	74
U.S. Federal Energy Administration	220 73, 106, 127, 224, 225, 226,
	227, 239, 350, 351, 366, 391,
U.S. General Accounting Office	444, 462 198, 211, 228, 229, 230, 231,
	232, 233, 234, 235, 236, 455,
U.S. Institute for Basic Standards	456 199, 200
U.S. International Trade Commission	237
U.S. Interstate Commerce Commission U.S. Library of Congress Congressional	444
Research Service	154, 201, 238
U.S. National Aeronautics and Space Administration	124, 128, 162, 265, 291,
Ames Research Center	297, 308, 309 124, 128, 265, 295, 296,
Longley Degeneral, G	298, 299
Langley Research Center Dryden Flight Research Center	202, 270, 285, 288 393
U.S. National Aviation Facilities Experimental Center	100
U.S. National Bureau of Standards U.S. Office of Emergency Preparedness	199, 200
U.S. Postal Service	74 444

SOURCE	ITEM NO.
U.S. President U.S. Synfuels Interagency Task Force	241 203
University of California University of Missouri University of Santa Clara University of Southern California Center for Futures Research University of Wisconsin	412 204 205 20
Virginia Highway and Transportation Research Council Voorhees (Alan M.) and Associates	50 102, 402
Washington Consortium of Universities Urban Transportation Center Western Michigan University Workshop on Alternative Energy Strategies World Energy Conference Conservation Commission U.S. National Committee	419 317 156, 157, 158, 159 23, 160 160 23